# **Updated** 10/15/15

# FEDERAL PROJECT

### **BIDDING INSTRUCTIONS**

#### FOR ALL PROJECTS:

- 1. Use pen and ink to complete all paper Bids.
- 2. As a minimum, the following must be received prior to the time of Bid opening:

## For a Paper Bid:

a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Offer, Agreement & Award form, e) a Bid Guaranty, (if required), and f) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

# For an Electronic Bid:

- a) a completed Bid using Expedite® software and submitted via the Bid Express<sup>TM</sup> webbased service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other Certifications or Bid requirements listed in the Bid Documents as due by Bid opening.
- 3. Include prices for all items in the Schedule of Items (excluding non-selected alternates).
- 4. Bid Guaranty acceptable forms are:
  - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
  - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
  - c) an electronic bid bond submitted with an electronic bid.
- 5. If a paper Bid is to be sent, "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

### IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form, and submit with your bid. If you are submitting your bid electronically, you must FAX the form to (207) 624-3431. This is a curable defect.

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207) 624-3410.

For complete bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, November 2014 Edition.

# **NOTICE**

The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain an optional plan holders list.

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments must fill out the on-line plan holder registration form and provide an email address to the MDOT Contracts mailbox at: <a href="MDOT.contracts@maine.gov">MDOT.contracts@maine.gov</a>. Each bid package will require a separate request.

Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.

The downloading of bid packages from the MDOT website is <u>not</u> the same as providing an electronic bid to the Department. Electronic bids must be submitted via <a href="http://www.BIDX.com">http://www.BIDX.com</a>. For information on electronic bidding contact Robert Skehan at <a href="maine.gov">robert.skehan@maine.gov</a>, Rebecca Snowden at <a href="maine.gov">rebecca.snowden@maine.gov</a> or Diane Barnes at <a href="maine.gov">diane.barnes@maine.gov</a>.

# **NOTICE**

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open

PIN:

Town:

Date of Bid Opening:

Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

Double Envelope: Bid Enclosed

PIN:

Town:

Date of Bid Opening:

Name of Contractor:

This should not be much of a change for those of you who use Federal Express or similar services.

Hand-carried Bids may be in one envelope as before, and should be marked with the following infrormation:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

October 16, 2001

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT	
, of the City/Town of	and State of
as Principal, and	as Surety, a
Corporation duly organized under the laws of the State of_	and having a usual place of
Business inand hereby he	eld and firmly bound unto the Treasurer of
the State of Maine in the sum of,fo	r payment which Principal and Surety bind
themselves, their heirs, executers, administrators, successor	s and assigns, jointly and severally.
The condition of this obligation is that the Principal has sub	mitted to the Maine Department of
Transportation, hereafter Department, a certain bid, attached	d hereto and incorporated as a
part herein, to enter into a written contract for the construction	ion of
and i	f the Department shall accept said bid
and the Principal shall execute and deliver a contract in the	form attached hereto (properly
completed in accordance with said bid) and shall furnish bo	nds for this faithful performance of
said contract, and for the payment of all persons performing	glabor or furnishing material in
connection therewith, and shall in all other respects perform	the agreement created by the
acceptance of said bid, then this obligation shall be null and	void; otherwise it shall remain in full
force, and effect.	
Signed and sealed this_	day of20
WITNESS:	PRINCIPAL:
	Ву
	Ву:
	Ву:
WITNESS	SURETY: By
	Ву:
	Name of Local Agency:

# **NOTICE**

# Bidders:

Please use the attached "Request for Information" form when submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI's may be faxed to 207-624-3431, submitted electronically through the Departments web page of advertised projects by selecting the RFI tab on the project details page or via e-mail to <a href="mailto:RFI-Contracts.MDOT@maine.gov">RFI-Contracts.MDOT@maine.gov</a>.

These are the only allowable mechanisms for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

When submitting RFIs by Email please follow the same guidelines as stated on the "Request for Information" form and include the word "RFI" along with the Project name and Identification number in the subject line.

State of Maine	RFI No:	
Department of Transportation		

# REQUEST FOR INFORMATION

	Date	Time	
Information Reque	ested for:		
WIN(S):	Town(s):	Bid I	Date:
Question(s):			
Request by: Company Name:		Phone:()	
Email:		Fax: ()	

Complete this form and fax to 207-624-3431. Attn: Project Manager (name listed on the "Notice to Contractors"), or Email questions to RFI-Contracts.MDOT@maine.gov, Please include the word "RFI" along with the Project Name and Identification Number in the Subject line, or electronically by using the RFI Tab located on the Individual Projects Detail page.

# **NOTICE**

# Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder shall submit the <u>Disadvantaged</u> <u>Business Enterprise Proposed Utilization</u> form with their bid. This is a curable bid defect.

The <u>Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan</u> form contains additional information that is required by USDOT.

The <u>Contractor's Disadvantaged Business Enterprise Proposed</u> <u>Utilization Plan</u> form should be used.

A copy of the new <u>Contractor's Disadvantaged Business</u> <u>Enterprise Proposed Utilization Plan</u> and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact The Office of Civil Rights at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at <a href="http://www.maine.gov/mdot/civilrights/dbe.htm">http://www.maine.gov/mdot/civilrights/dbe.htm</a>

# INSTRUCTIONS FOR PREPARING THE MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION FORM

The Contractor Shall Extend equal opportunity to MaineDOT certified DBE firms (as listed in MaineDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

# SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone, fax number and e-mail address.

Calculate and provide percentage of your bid that will be allocated to DBE firms, Federal Project Identification Number, and location of the Project work.

In the columns, name each subcontractor, DBE and non-DBE firm to be used, provide the Unit/Item cost of the work/product to be provided by the subcontractor, give a brief description and the dollar value of the work.

Revised 1/12

# FHWA DBE GOAL NOTICE FFY 2016-18

# Maine Department of Transportation Disadvantaged Business Enterprise Program

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid highway and bridge construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2016-18 (October 1, 2015 through September 30, 2018) MaineDOT has established an annual DBE participation goal of **2.0%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration and remains in effect through September 30, 2018. Maine DOT must meet this goal each federal fiscal year. If the goal is not met, MaineDOT must provide a justification for not meeting the goal and provide a plan to ensure the goal is met, which may include contract goals on certain projects that contractors will be required to meet.

MaineDOT asks all contractors, consultants and subcontractors to seek certified DBE firms for projects and to work to meet the determined 2.0% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

# http://www.maine.gov/mdot/civilrights/dbe/

Interested parties may view MaineDOT's DBE goal setting methodology also posted on this website. If you have questions regarding this goal or the DBE program you may contact Sherry Tompkins at the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3066 or by e-mail at: <a href="mailto:sherry.tompkins@maine.gov">sherry.tompkins@maine.gov</a>

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# MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR PROPOSED UTILIZATION FORM

## All Bidders must furnish this form with their bid on Bid Opening day

Contractor:			ne:				
	Con	tact Pers	on:	Fax: _			
]	E-m	ail:					
I	BID	DATE: _					
J	ED	ERAL PR	ROJECT PIN #	PROJECT LOCATIO	ON:		
			TOTAL ANTICIPAT	ED DBE % PARTICIPATION	ON FOR THIS CO	ONTRACT	
W B E	D B E	Non DBE	Firm Name	Item Number & Description of Work	Quantity	Cost Per Unit/Item	Anticipated \$ Value
						Subcontractor	
						Total>	
						DBE Total >	
I	ED	ERALLY		O TRACK AND REPORT ANTIC NTRACTS. THE ANTICIPATED RACTUAL TERMS.			
ľ		Equal Op	pportunity Use:				
		Form rec	ceived:/ Verifi	ed by:			
			FHWA [	□ FTA □	FAA [		

For a complete list of certified firms and company designation (WBE/DBE) go to

Rev. 05/13

http://www.maine.gov/mdot

# **Maine Department of Transportation Civil Rights Office**

# Directory of Certified Disadvantaged Business Enterprises Listing can be found at:

http://www.maine.gov/mdot/civilrights/dbe.htm

For additional information and guidance contact: Civil Rights Office at (207) 624-3066

It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listing.

# **Vendor Registration**

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

http://www.maine.gov/purchases/venbid/index.shtml

## STATE OF MAINE DEPARTMENT OF TRANSPORTATION NOTICE TO CONTRACTORS

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for Hot Mix Asphalt Overlay with Safety Improvements in the town of Cumberland" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on June 29, 2016 and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a Highway Construction, Paving, or project specific prequalification to be considered for the award of this contract. We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening. Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: 018670.00, WIN 18670.00.

Location: In Cumberland County, project is located on Blanchard Road beginning 0.66 miles east of Bruce Hill Road and extending southeasterly 1.00 mile to Main Street.

Outline of Work: Hot Mix Asphalt Overlay with Safety Improvements and other incidental work.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at http://www.maine.gov/mdot/contractors/ contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Projectspecific information fax all questions to Scott Bickford at (207) 624-3431, use electronic RFI form or email questions to RFI-Contracts.MDOT@maine.gov, project name and identification number should be in the subject line. Questions received after 12:00 noon of Monday (or if that Monday is a state holiday, Friday) prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Scarborough. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Bid Book \$10 (\$13 by mail), payment in advance, all non-refundable.

Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$12,000 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable State Laws.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition", price \$10 [\$15 by mail], and Standard Details, November 2014 Edition, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Standard Detail updates can be found at http://www.maine.gov/indot/contractors/publications/.

The right is hereby reserved to the Maine DOT to reject any or all bids.

Augusta, Maine June 15, 2016

Joyce
Noel Tav

JOYCE NOEL TAYLOR P. E. CHIEF ENGINEER

CUMBERLAND 18670.00 April 14, 2011 Supersedes August 3, 2004

## SPECIAL PROVISION 102.7.3 ACKNOWLEDGMENT OF BID AMENDMENTS

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <a href="http://www.maine.gov/mdot/contractors/">http://www.maine.gov/mdot/contractors/</a>. It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

	CONTRACTOR
Date	Signature of authorized representative
	(Name and Title Printed)

# **Maine Department of Transportation**

# **Proposal Schedule of Items**

Page 1 of 3

**Proposal ID:** 018670.00 **Project(s):** 018670.00

**SECTION:** 1 HIGHWAY ITEMS

Alt Set ID: Alt Mbr ID:

Contractor:

Proposal Line Item ID	Approximate	Unit Price	Bid Amount	
Description	Quantity and Units	Dollars Cents	Dollars Cents	
202.203 PAVEMENT BUTT JOINTS	750.000 SY		!	
403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	130.000 T	!	!	
403.210 HOT MIX ASPHALT 9.5 MM	1,300.000 T	!		
403.211 HOT MIX ASPHALT (SHIMMING)	800.000 T	!		
409.15 BITUMINOUS TACK COAT - APPLIED	1,100.000 G	!	!	
411.10 UNTREATED AGGREGATE SURFACE COURSE (TRUCK MEASURE)	50.000 CY	!	!	
604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	25.000 EA	!	!	
615.07 LOAM	50.000 CY	<u> </u>	<u> </u>	
615.10 DIRTY BORROW	56.000 CY	<u> </u>	<u></u> !	
618.13 SEEDING METHOD NUMBER 1	10.000 UN		!	
618.14 SEEDING METHOD NUMBER 2	10.000 UN		!	
619.12 MULCH	40.000 UN	<u></u> !		
	202.203 PAVEMENT BUTT JOINTS  403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS) 403.210 HOT MIX ASPHALT 9.5 MM  403.211 HOT MIX ASPHALT (SHIMMING) 409.15 BITUMINOUS TACK COAT - APPLIED 411.10 UNTREATED AGGREGATE SURFACE COURSE (TRUCK MEASURE) 604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE 615.07 LOAM 615.10 DIRTY BORROW 618.13 SEEDING METHOD NUMBER 1 618.14 SEEDING METHOD NUMBER 2	Description         Quantity and Units           202.203         750.000           PAVEMENT BUTT JOINTS         SY           403.209         130.000           HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)         T           403.210         1,300.000           HOT MIX ASPHALT 9.5 MM         T           403.211         800.000           HOT MIX ASPHALT (SHIMMING)         T           409.15         1,100.000           BITUMINOUS TACK COAT - APPLIED         G           411.10         50.000           UNTREATED AGGREGATE SURFACE COURSE (TRUCK MEASURE)         CY           604.18         25.000           ADJUSTING MANHOLE OR CATCH BASIN TO GRADE         EA           615.07         50.000           LOAM         CY           615.10         56.000           DIRTY BORROW         CY           618.13         10.000           SEEDING METHOD NUMBER 1         UN           618.14         10.000           SEEDING METHOD NUMBER 2         UN           619.12         40.000	Item ID   Description	

6/10/2016

# **Maine Department of Transportation**

# **Proposal Schedule of Items**

Page 2 of 3

**Proposal ID:** 018670.00 **Project(s):** 018670.00

**SECTION:** 1 HIGHWAY ITEMS

Alt Set ID: Alt Mbr ID:

Contractor:

Proposal Line	Item ID	Approximate	Unit Price	Bid Amount
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents
0130	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	15,580.000 LF	!	!
0140	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	40.000 SF	!	!
0150	627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	31,160.000 LF	<u></u> !	!
0160	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR	!	!
0170	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20.000 HR	<u>!</u>	!
0180	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	40.000 HR	<u>!</u>	!
0190	639.19 FIELD OFFICE TYPE B	1.000 EA	<u> </u>	!
0200	652.33 DRUM	150.000 EA		!
0210	652.34 CONE	150.000 EA		!
0220	652.35 CONSTRUCTION SIGNS	1,260.000 SF		!
0230	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	61.000 CD	!	!

6/10/2016

# **Maine Department of Transportation**

# Proposal Schedule of Items

Page 3 of 3

**Proposal ID:** 018670.00 **Project(s):** 018670.00

**SECTION**: 1 HIGHWAY ITEMS

Alt Set ID: Alt Mbr ID:

Contractor:

Proposal Line	Item ID	Approximate		Bid Amount	
Number	Description	Quantity and Units	Dollars Cents	Dollars Cents	
0240	652.38 FLAGGER	1,000.000 HR	!	<u> </u>	
0250	652.381 TRAFFIC OFFICER	50.000 HR	!	!	
0260	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM	LUMP	!	
0270	659.10 MOBILIZATION	LUMP SUM	LUMP SUM		
	Section: 1		Total:		
			Total Bid:	<u></u>	

# CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

#### A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, WIN No. 18670.00 for the Hot Mix Asphalt Overlay with Safety Improvements in the town of Cumberland, County of Cumberland, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

#### B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **December 3, 2016.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

#### C. Price.

The quantities give	en in the Schedule of Items of the Bid Package will be used as the
basis for determini	ng the original Contract amount and for determining the amounts of
the required Performs of this offer is	mance Surety Bond and Payment Surety Bond, and that the amount
\$	Performance Bond and Payment Bond each being
100% of the amoun	nt of this Contract.

#### D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

### E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

#### F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: <u>WIN No. 18670.00 for the Hot Mix Asphalt Overlay with Safety Improvements in the town of Cumberland, County of Cumberland, State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".</u>

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

### As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, November 2014 Edition, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications November 2014 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

		CONTRACTOR
Date		(Signature of Legally Authorized Representative of the Contractor)
	Witness	(Name and Title Printed)
G.	Award.  Your offer is hereby accepted.	This award consummates the Contract, and the
	documents referenced herein.	MAINE DEPARTMENT OF TRANSPORTATION
	Date	By: David Bernhardt, Commissioner
	Witness	

# CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

#### A. The Work.

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, <u>WIN No. 18670.00 for the Hot Mix Asphalt Overlay with Safety Improvements in the town of Cumberland, County of Cumberland, Maine.</u> The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

#### B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **December 3, 2016.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

#### C. Price.

The quantities give	n in the Schedule of Items of the Bid Package will be used as the
basis for determining	g the original Contract amount and for determining the amounts or
the required Perform of this offer is	mance Surety Bond and Payment Surety Bond, and that the amoun
\$	Performance Bond and Payment Bond each being
100% of the amoun	t of this Contract.

#### D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

### E. Certifications.

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
- 3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

#### F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of: <u>WIN No. 18670.00 for the Hot Mix Asphalt Overlay with Safety Improvements in the town of Cumberland, County of Cumberland, State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".</u>

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

### As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, November 2014 Edition, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications November 2014 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fifth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

		CONTRACTOR		
Date		(Signature of Legally Authorized Representative of the Contractor)		
	Witness	(Name and Title Printed)		
G.	Award.  Your offer is hereby accepted.	This award consummates the Contract, and the		
	documents referenced herein.	MAINE DEPARTMENT OF TRANSPORTATION		
	Date	By: David Bernhardt, Commissioner		
	Witness			

# CONTRACT AGREEMENT, OFFER & AWARD

AGREEMENT made on the date last signed be low, by an d between the State of Maine, acting through and by its Departm ent of Trans portation (D epartment), an agency of state government with its principal adm inistrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job)

a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

## A. The Work.

The Contractor agrees to come plete all Work as specified or indicated in the Contract including Extra Work in conform its with the Contract, PLV No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of South Nowhere, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other includental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Departm ent shall have the right to alte r the nature and exten t of the W ork as provided in the Contract; payment to be made as provided in the same.

#### B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2006. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002 and related Special Provisions.

#### C. Price.

The quantities given in the Schedule of Item s of the Bid Package will b e used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_ (Place bid here in alphabetical form such as One Hundred and

Two dollars and 10 cents)
\$ (repeat bid here in numerical terms, such as \$102.10)

Perform ance

Bond and Payment Bond each being 100% of the amount of this Contract.

#### D. Contract.

This Contract, which may be am ended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Rlans, Standard Specifications, Revision of Decemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and unders tood that this Contract will be governed by the documents listed above.

### E. Certifications.

By signing below, the Contractor hereby dertifies that to the best of the Contractor's knowledge and belief:

- 1. All of the statem ents representations, cove nants, a nd/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the S tandard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the C ontract are still complete and accurate as of the date of this Agreement.
- 2. The Contractor knows of no legal, contract ual, or financial impedim ent to entering into this Contract.
- 3. The person signing below is legally aut horized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the term s of the Contract.

#### F. Offer.

The undersigned, having carefully exam ined the site of work, the Plans, Standard Specifications, Revision of December 2002, St andard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract A greement; and Contract Bonds contained herein for construction of:

PIN 1234.00 South Nowhere, Hot Mix Asphalt Overlay

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to en ter into this contract at to supply all the materials, tools, equipment and I abor to construct the whole of the Work in strict accordance with the term s and conditions of the is Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the at tached "Schedule of items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees

First: \To do any extra work, not covered \ by the attach ed "Schedule of Items", which may be ordered by the Resident, and to accept as full com pensation the am ount determined upon a "Force Account" basis as \ provided in the Sta ndard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the a mount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the term sand conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this of fer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certif ies, to the best of its know ledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or o therwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

	Agreement and thereby binds itself to all covenants, Contract Documents  CONTRACTOR  (Sign Here)  (Sign Here)  (Print Name Here)  (Name and Title Printed)  This award consumm ates the Contract, and the
	MAINE DEPARTMENT OF TRANSPORTATION
Date	By: David Bernhardt, Commissioner
(Witness)	

BOND	#	

# CONTRACT PERFORMANCE BOND

(Surety Company Form)

KNOW ALL MEN BY THESE PRESENT	S: That
	, as principal,
and	
	ws of the State of and having a
as Surety, are held and firmly bound unto of	the Treasurer of the State of Maine in the sum and 00/100 Dollars (\$
to be paid said Treasurer of the State of	Maine or his successors in office, for which cipal and Surety bind them selves, their heirs,
the Contract to construct Project Num	faithfully perfor ms the Contract, then this
The Surety hereby waives notice of any alto of Maine.	era tion or extension of time made by the State
Signed and sealed this	day of, 20
WITNESSES: SIGNATURES: CONTRACTOR:	
Signature	
	Print Name Legibly
Signature	
Print Name Legibly	Print Name Legibly
SURETY ADDRESS:	NAME OF LOCAL AGENCY:
	ADDRESS
TELEPHONE	

BOND#	

# CONTRACT PAYMENT BOND

(Surety Company Form)

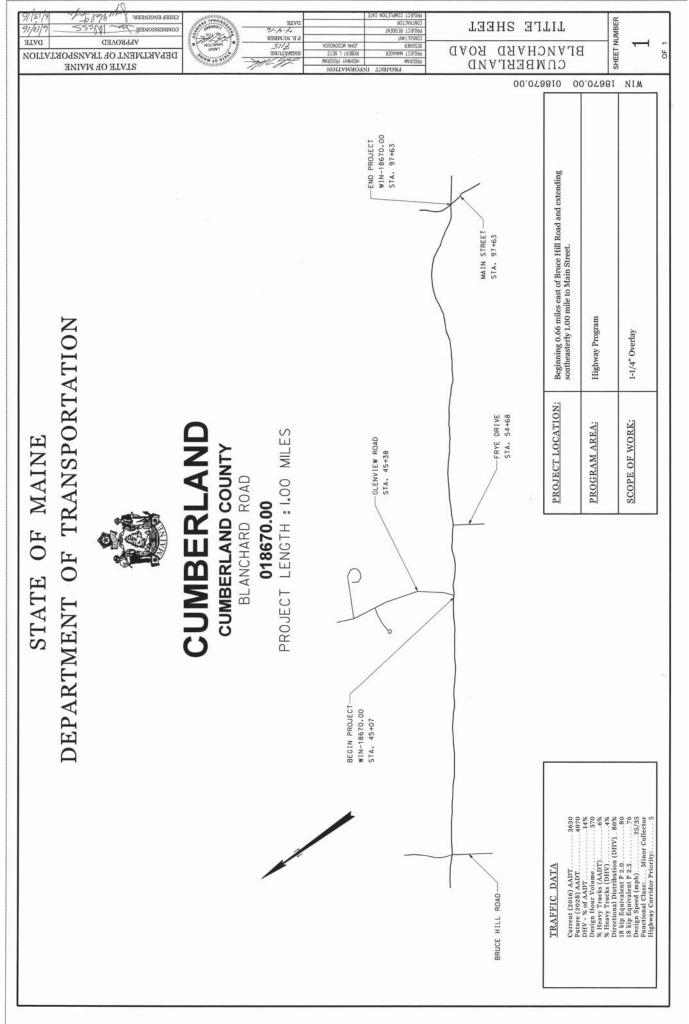
KNOW ALL MEN BY THESE PRESEN	NTS: That	
in the Sta	nte of	, as principal,
and		
a corporation duly organized under the la usual place of business in		_
as Surety, are held and firm ly bound unt		
and benefit of claim ants as herein		
	and 00/100 l	
for the payment whereof Principal and S administrators, successors and assigns, jo		
The condition of this obligation is such the Contract to construct Project Num	ber in to satisfies all claims and of im in connection with the ob-ligee for all outlay are fault of said Principal, to in full force and effect.	the Municipality of demands incurred for all e work contemplated by and expense which the hen this obligation shall Principal or with a
Signed and sealed this	day of	20
WITNESS: SIGNATURES:	. <b></b>	, = 0
	CONTRACTOR:	
Signature		
Print Name Legibly	Print Name Legibly SURETY:	
Signature		
Print Name Legibly		
SURETY ADDRESS:	NAME OF LOCAL ADDRESS	AGENCY:
TELEPHONE		
	viii	

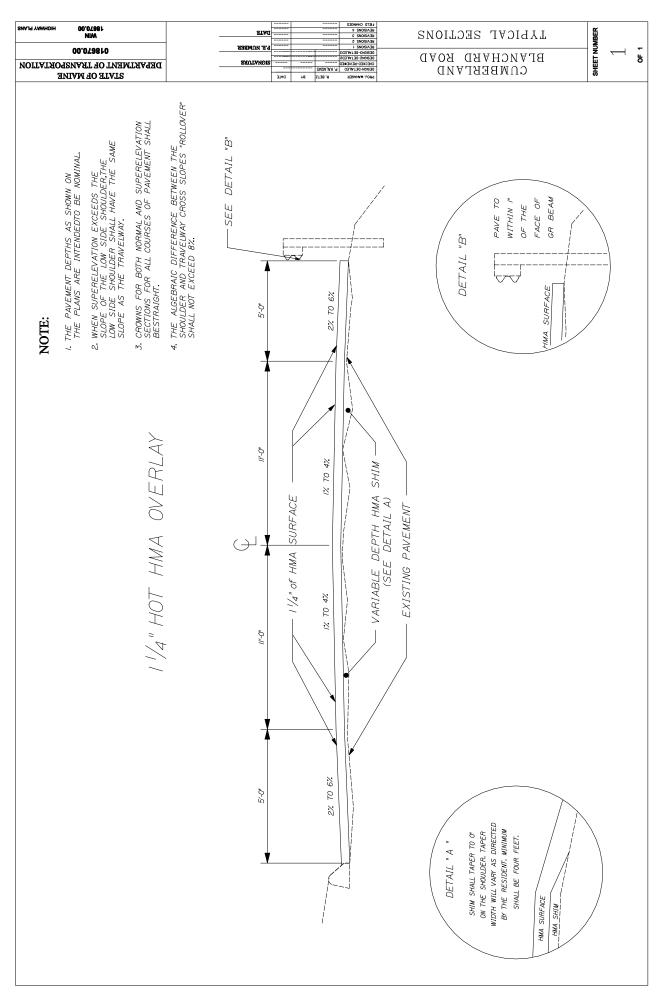
Non-federal Projects Only

## NOTICE TO CONTRACTORS - PREFERRED EMPLOYEES

Sec. 1303. Public Works; minimum wage

In the employment of laborers in the construction of public works, including state highways, by the State or by persons contracting for the construction, preference must first be given to citizens of the State who are qualified to perform the work to which the employment relates and, if they can not be obtained in sufficient numbers, then to citizens of the United States. Every contract for public works construction must contain a provision for employing citizens of this State or the United States. The hourly wage and benefit rate paid to laborers employed in the construction of public works, including state highways, may not be less than the fair minimum rate as determined in accordance with section 1308. Any contractor who knowingly and willfully violates this section is subject to a fine of not less than \$250 per employee violation. Each day that any contractor employs a laborer at less than the wage and benefit minimum stipulated in this section constitutes a separate violation of this section. [1997, c. 757, §1 (amd).]





Filename: \$meau \$wignoup \$ Username: \$user, Swignoup \$ Username: \$meau \$ User, Swignoup \$ U

35

# PROJECT STATIONING

<u>Left Side</u>		<b>Statio</b>	<u>n</u>	Right Side
End Project		97+63		End Project
		94+71		Porcupine Ridge Road Pvt.
Pole # 6		89+65		
Mulberry Lane	Pvt.		84+45	
Rustic Way Pvt.		79+39		
Pole # 17		76+02		
Pole # 21		70+78		
Pole # 25		65+70		
		58+60		Windsor Road Pvt.
		54+68		Frye Drive
Frankie Lane Pvt.		50+50		
Glenview Road		45+38		
Begin Project		45+07		Begin Project

### **CONSTRUCTION NOTES**

### 202.203 PAVEMENT BUTT JOINTS

<b>Description</b>	<b>Station</b>
Begin Project	45+07
End Project	97+63

<b>Description</b>	<b>Quantity</b>
Paved Drives	35
Side Roads	4

### 403.211 HOT MIX ASPHALT (SHIMMIMG)

The Contractor shall shim to the cross slopes provided by the Resident. Cross slopes and mark ups shall be provided to the Contractor by the Resident prior to commencing shimming operations.

### 411.10 UNTREATED AGGREGATE SURFACE COURSE

<u>Description</u> # of Drives Gravel Drives 23

### 604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE

<b>Station</b>	<u>Side</u>	<u>Station</u>	<u>Side</u>
48+00	LT	84+73	LT
48+00	RT	84+73	RT
56+39	LT	87+49	RT
58+42	LT	87+53	LT
60+22	LT	90+44	LT
60+22	RT	90+46	RT
65+07	LT	92+14	LT
65+07	RT	92+18	RT
68+07	LT	94+68	RL
68+07	RT	94+71	LT
79+54	LT	96+55	LT
79+57	RT	97+16	LT
81+59	RT		

Undetermined locations as Directed by Resident

### **CONSTRUCTION NOTES**

### 606.231 GUARDRAIL TYPE 3C (4.5M) RADIUS AND LESS

 Station
 To
 Station
 Side

 67+90
 68+05
 RT

### 606.265 TERMINAL END-SINGLE RAIL GALVANIZED STEEL

<u>Station</u> <u>Side</u> <u>Quantity</u> RT 1

### 627.733 4 INCH WHITE OR YELLOW PAVEMENT MARKING LINE

Final striping will not commence until 10 days have elapsed from the completion of surface pavement and must be completed within 20 days of the completion of surface pavement. Unless otherwise directed, failure to comply will result in a Traffic Control Violation.

Once Construction is Complete, Maintenance of Traffic Control Devices (652.36) will not be paid while waiting to final stripe.

Once Construction is Complete, Liquidated Damages will not be charged while waiting to final stripe

### 627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING

**Stop Bars** 

<u>Station</u> <u>Quantity</u> 97+40 1

### **CONSTRUCTION NOTES**

### <u>627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW</u>

Temporary center lines shall be painted on all matched pavement within one week.

Temporary edge lines shall be painted on all pavement layers within four weeks.

All temporary lines shall be painted prior to final striping.

Multilane sections, truck lanes, and milled surfaces must be striped daily on all matched pavement layers.

TOMs must be used on all pavement layers until temporary paint is applied.

TOMs will be removed before final striping.

TOM removal will be addressed in the Traffic Control Plan.

Only painted temporary line will be paid under this item. TOMs will be considered incidental to the contract.

### GENERAL NOTES

- 1) All joints between existing and proposed hot bituminous pavement shall be butted. Payment shall be made under Item 202.203 Pavement Butt Joint.
- 2) Construct butt joints at all paved drives and entrances.
- 3) A temporary ramp shall be constructed with HMA at the ends of the roadway section paved or milled each day. The use of millings or RAP will not allowed, but cold patch may be temporarily utilized until HMA plants are open for the season.

For Interstate Highways or roadways with speed limits exceeding 50 mph, temporary ramps shall be constructed with one foot of length for every 1/8" of transition depth on the leading end, and one foot of length for every 1/4" of transition depth on the trailing end.

For all other roadways with speed limits less than 50 mph, temporary ramps shall be constructed with one foot of length for every 1/4" of transition depth on the leading and the trailing end.

Materials, placement, maintenance, and removal shall be incidental to contract items.

- 4) Prior to removing any pavement or placing any shim pavement, the roadway will be inspected for possible subsurface boulders and removed as directed by the Resident. Payment will be made under appropriate rental items. Backfill will be placed to subgrade with material consistent with the surrounding material. Aggregate subbase course gravel will be placed from subgrade to finish grade and will be paid under the appropriate item.
- 5) The Contractor shall place suitable existing or other material acceptable to the Resident on all pavement edges to allow a drop off no greater than the surface pavement thickness. The material shall be graded to match existing in-slope or as directed by the Resident before surface is placed. The contractor will be paid under appropriate equipment rental items. Borrow is not authorized until all acceptable waste material has been utilized. Seed and Mulch will be paid for at the contract unit price.
- 6) All waste material not used on the project shall be disposed of in acceptable waste areas and reviewed by the Resident. Grading, seeding, and mulching of waste areas shall be considered incidental.
- 7) A 3' paved lip shall be placed at all gravel entrances unless otherwise noted in the plans or directed by the Resident.

- 8) No existing drainage shall be abandoned, removed or plugged without prior approval of the Resident.
- 9) Guardrail end treatments shall be installed concurrently with the placement of each section of beam guardrail.
- 10) Holes created by Guardrail removal will be filled and compacted with approved materials as directed by the Resident. Payment to be considered incidental to the guardrail items.
- 11) Any guardrail removed and not reused shall become the property of the Contractor. Removal and disposal shall be considered incidental to the guardrail items.
- 12) Connections for proposed guardrail to existing guardrail will be considered incidental to Item 606
- 13) Loam has been estimated for disturbed lawn areas. Actual placement of the loam shall be as noted on the plans or designated by the Resident.
- 14) Dirty borrow has been estimated for all disturbed slope areas other than lawn areas. Actual placement of the dirty borrow shall be as noted on the plans or designated by the Resident.
- 15) Unless otherwise noted Seeding Method No. 1 shall be utilized on all lawns and developed areas; Seeding Method No. 2 shall be utilized on all non-guardrail slopes. Seeding Method No. 3 shall be utilized on all guardrail fill slopes. On long non-guardrail backslopes, Seeding Method No. 3 may be used instead of Method No. 2 if noted or directed by the Resident.
- 16) Loam shall be placed to a nominal depth of 4 inches in lawn areas and 2 inches in all other areas unless otherwise noted or directed.
- 17) Dirty borrow shall be placed to a nominal depth of 2 inches unless otherwise noted or directed
- 18) The contractor will be responsible for maintaining all existing mailboxes to ensure that the mail will be deliverable each day. Payment will be made under appropriate rental items.
- 19) Any damage to the slopes caused by the contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the resident. All work, equipment, and materials required to make repairs shall be at the contractor's expense.

- 20) Additional excavation for the contractor's convenience or to comply with backsloping requirements will not be paid for directly but will be considered incidental to the related drainage items.
- 21) "Undetermined Locations" shall be determined by the Resident.
- 22) Stations referenced are approximate.
- 23) The contractor will place appropriately marked stakes at the following locations on the project: striping pattern changes, cross-slope changes, and every 500' for stationing. The contractor will paint every full station (100') on the existing roadway and will transfer the painted stationing through all intermediate lifts (not surface). Appropriately sized striping pattern changes will be painted on surface. Stationing control must be placed before work can commence. Cross-slope and striping change controls must be placed before paving can commence.

### SPECIAL PROVISIONS SECTION 104 Utilities

### **UTILITY COORDINATION**

The contractor has primary responsibility for coordinating their work with utilities after contract award. The contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the contractor's schedule and prevent project construction delays. The contractor shall notify the resident of any issues.

### THE CONTRACTOR SHALL PLAN AND CONDUCT WORK ACCORDINGLY.

### **MEETING**

A Preconstruction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **is** required.

### **GENERAL INFORMATION**

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with this project. The following list identifies all known utilities or railroads having facilities presently located within the limits of this project or intending to install facilities during project construction.

Utilities have been notified and will be furnished a project specification.

### **Overview:**

Utility/Railroad	Aerial	Underground	Railroad
Central Maine Power Company	X		
FairPoint Communications – NNE	X	X	
Telephone Operations, LLC			
Time Warner Cable	X	X	
Portland Water District		X	
Summit Natural Gas of Maine		X	

Utility (	Contact Information	
Utility/Railroad	Contact Person	<b>Contact Phone</b>
Central Maine Power Company	William Briggs	828-2831
FairPoint Communications	Marty Pease	797-1119
Time Warner Cable	Mark Pelletier	253-2324
Portland Water District	Christian Rodriguez	774-5961
Summit Natural Gas	Paul Lewis	252-0002

Temporary utility adjustments are **not** anticipated.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All adjustments are to be made by the respective utility/railroad unless otherwise specified herein.

All clearing and tree removal in areas where utilities are involved must be completed before the utilities are able to relocate their facilities.

Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

Utility working days are Monday through Friday. Times are estimated on the basis of a single crew for each utility. Any times and dates mentioned are **estimates only** and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractor shall have no claim against the Department if they are exceeded.

### **AERIAL**

### **Central Maine Power Company**

Central Maine Power Company has facilities within the limits of the project. **No involvement is anticipated at this time.** 

### **FairPoint Communications**

FairPoint Communications has facilities within the limits of the project. **No involvement is anticipated at this time.** 

### **Time Warner Cable**

Time Warner Cable has facilities within the limits of the project. **No involvement is anticipated at this time.** 

### **SUBSURFACE**

### Summary:

Utility	Summary of Work	Estimated Working Days
Portland Water District	Surface Adjustments – Gate Valves	10
Summit Natural Gas	Surface Adjustments – Gate Valves	2
FairPoint Communications	No Work Anticipated	0
Time Warner Cable	No Work Anticipated	0
	Total:	12

### **Utility Specific Issues:**

### **Portland Water District**

Portland Water District has 18-24 water gate valves within the limits of the project. The Portland Water District will <a href="mailto:prep">prep</a> (inspect, loosen, and repair) all of their water gates prior to paving. Portland Water District estimates 10 Working Days to complete their water gate prep. Once prepped, and prior to finish paving, the Contractor shall check boxes for mobility and report any issues to the District. <a href="mailto:The Contractor shall raise all gates during all paving operations with Portland Water District oversight. The payment for this work will be considered incidental to the paving item.">the District oversight. The payment for this work will be considered incidental to the paving item.</a>. The Contractor will notify the District at least 48 hours prior to final paving for oversight purposes. The contact for the Portland Water District is Christian Rodriguez at 774-5961.

### **Summit Natural Gas**

Summit Natural Gas (SNG) has approximately two (2) gate valves within the limits of the project. SNG will prep (inspect, loosen, and repair) all of their gas gates prior to paving. SNG estimates 2 Working Days to complete their gas gate prep. Once prepped, and prior to finish paving, the Contractor shall check boxes for mobility and report any issues to SNG The Contractor shall raise all gates during all paving operations with SNG oversight. The payment for this work will be considered incidental to the paving item. The Contractor shall notify SNG at least 48 hours prior to final paving for oversight purposes. The contact for the SNG is Ryan Morris at 624-1878.

### **FairPoint Communications**

FairPoint Communications has facilities within the limits of the project. **No involvement is anticipated at this time.** 

### **Time Warner Cable**

Time Warner Cable has facilities within the limits of the project. **No involvement is anticipated at this time.** 

### MAINTAINING UTILITY LOCATION MARKNIGS

The Contractor will be responsible for maintaining the buried utility location markings following the initial locating by the appropriate utility or their designated representative.

### **UTILITY SIGNING**

Any utility working within the construction limits of this project shall ensure that the traveling public is adequately protected at all times. All work areas shall be signed, lighted, and traffic flaggers employed as determined by field conditions. All traffic controls shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as issued by the Federal Highway Administration.

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### THIS DOCUMENT MUST BE CLEARLY POSTED AT THE PERTAINING STATE FUNDED PREVAILING WAGE CONSTRUCTION SITE

State of Maine
Department of Labor
Bureau of Labor Standards
Wage and Hour Division
Augusta, Maine 04333-0045
Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRSA §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid laborers and workers employed on the below titled project.

Title of Project ------18670.00-Cumberland, Blanchard Road Overlay

Location of Project -Cumberland, Cumberland County

### 2016 Fair Minimum Wage Rates

### Highway & Earthwork Cumberland County

	nignv	vay or care	HOWIT	Juliberially County			
Occupation Title	Minimum Wage	Minimum Benefit	Total	Occupation Title	Minimum Wage	Minimum Benefit	Total
Asphalt Raker	\$15.00	\$0.00	\$15.00	Ironworker – Structural	\$23.20	\$6.20	\$29.40
Backhoe Loader Operator	\$19.00	\$3.03	\$22.03	Laborers (Incl. Helpers & Tenders)	\$14.00	\$0.37	\$14.37
Blaster Ordinance Handling & Explosives	\$19.75	\$2.02	\$21.77	Laborer – Skilled	\$16.00	\$1.04	\$17.04
Boom Truck (Truck Crane) Operator	\$21.00	\$2.85	\$23.85	Line Erector - Power/Cable Splicer	\$25.88	\$5.88	\$31.76
Bulldozer Operator	\$18.00	\$3.24	\$21.24	Loader Operator - Front End	\$17.25	\$2.89	\$20.14
Carpenter	\$20.00	\$1.63	\$21.63	Mechanic - Maintenance	\$18.50	\$1.95	\$20.45
Carpenter - Rough	\$18.00	\$1.15	\$19.15	Mechanic - Refrigeration	\$22.00	\$3.54	\$25.54
Concrete Mixing Plant Operator	\$20.00	\$4.46	\$24.46	Painter	\$18.00	\$3.33	\$21.33
Concrete Pump Operator	\$20.00	\$0.00	\$20.00	Paver Operator	\$18.00	\$0.00	\$18.00
Crane Operator <15 Tons	\$18.61	\$2.97	\$21.58	Pipe Layer	\$19.33	\$2.37	\$21.70
Crane Operator =>15 Tons	\$24.50	\$6.61	\$31.11	Pump Installer	\$25.00	\$4.67	\$29.67
Crusher Plant Operator	\$16.50	\$4.72	\$21.22	Reclaimer Operator	\$21.00	\$11.34	\$32.34
Driller – Rock	\$19.25	\$4.30	\$23.55	Roller Operator - Earth	\$11.75	\$0.30	\$12.05
Dry-Wall Applicator	\$21.50	\$2.63	\$24.13	Roller Operator – Pavement	\$17.03	\$1.02	\$18.05
Earth Auger Operator	\$23.00	\$0.00	\$23.00	Screed/Wheelman	\$19.00	\$1.79	\$20.79
Electrician – Licensed	\$26.00	\$13.87	\$39.87	Sider	\$23.00	\$1.77	\$24.77
Excavator Operator	\$18.90	\$2.32	\$21.22	Stone Mason	\$17.80	\$0.00	\$17.80
Fence Setter	\$15.25	\$1.32	\$16.57	Truck Driver - Light	\$13.50	\$0.00	\$13.50
Flagger	\$9.00	\$0.00	\$9.00	Truck Driver - Medium	\$16.00	\$0.52	\$16.52
Grader/Scraper Operator	\$18.00	\$1.04	\$19.04	Truck Driver - Heavy	\$15.00	\$0.99	\$15.99
Highway Worker/Guardrail Installer	\$15.00	\$1.16	\$16.16	Truck Driver - Tractor Trailer	\$16.50	\$1.07	\$17.57
Hot Top Plant Operator	\$23.60	\$9.48	\$33.08	Truck Driver - Mixer (Cement)	\$12.50	\$4.01	\$16.51

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

Apprentices - The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Posting of Schedule - Posting of this schedule is required in accordance with 26 MRSA §1301 et. seq., by any contractor holding a State contract for construction valued at \$50,000 or more and any subcontractors to such a contractor.

Appeal - Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates with the Secretary of State.

**Determination No:** 

HI-074-2016

Filing Date:

April 15, 2016

**Expiration Date:** 

12-31-2016

A true copy

Pamela Megathli

Director

**Bureau of Labor Standards** 

BLS 424B2 (R2016)(Highway/Earthwork Cumberland)

### SPECIAL PROVISION SECTION 105

### GENERAL SCOPE OF WORK (LIMITATIONS OF OPERATIONS)

- 1. Businesses will be fully and safely accessible to pedestrians during all open hours. All established pedestrian routes will be fully accessible and in safe operating condition during the hours stated above.
- 2. All travel lanes will be open to traffic and in safe operating condition between daily work operations.
- 3. Only one paving operation will be allowed, excluding hand placed paving, unless otherwise approved by Resident.
- 4. No work will be allowed on Saturday without 48 hour notice and/or prior approval of the Resident.
- 5. Work performed outside of a WIN's designated work hours, will be an incremental traffic control violation, given in 15 minute intervals. Failure to follow the MUTCD, and/or the contractor's Traffic Control Plan will result in a Traffic Control Violation.
- 6. The contractor shall maintain one-way alternating traffic.
- 7. A 48-hour notice will be required for any changes in the work schedule.
- 8. All work will be performed during daylight hours as defined in the Standard Specification 652.6.1
- 9. On the 4<sup>th</sup> of July holiday weekend, operations will cease at 3:00P.M. On Friday, July 1, and may resume on Tuesday, July 5.
- 10. On the Labor Day holiday weekend, operations will cease at 3:00 P.M. on Friday, September 2, and may resume on Tuesday, September 6.
- 11. Due to the 2016 Annual Cumberland Fair operations will cease on Friday, September 16 and may resume on Monday October 3.
- 12. The contractor's Traffic Control Plan will address construction practices and schedules that will be implemented to minimize traffic disruptions.

Project No.: 018670.00

### SPECIAL PROVISION 105 CONSTRUCTION AREA

A Construction Area located in the **Town of Cumberland** has been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

- (a) The section of highway under construction in Cumberland County, Project No. 018670.00 is located on Blanchard Road, beginning 0.66 mi. east of Bruce Hill Road and extending southeasterly 1.00 mile to Main Street.
  - Per 29-A § 2382 (7) MRSA, the MDOT may "issue permits for stated periods of time for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The permit:
- A. Must be procured from the municipal officers for a construction area within that municipality;
- B. May require the contractor to be responsible for damage to ways used in the construction areas and may provide for:
  - (1) Withholding by the agency contracting the work of final payment under contract; or
  - (2) The furnishing of a bond by the contractor to guarantee suitable repair or payment of damages.

The suitability of repairs or the amount of damage is to be determined by the Department of Transportation on state-maintained ways and bridges, otherwise by the municipal officers;

- C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and
- D. For construction areas, carries no fee and does not come within the scope of this section."

The Municipal Officers for the **Town of Cumberland** agreed that an Overlimit Permit will be issued to the Contractor for the purpose of using loads and equipment on municipal ways in excess of the limits as specified in 29-A MRSA, on the municipal ways as described in the "Construction Area".

As noted above, a bond may be required by the municipality, the exact amount of said bond to be determined prior to use of any municipal way. The MDOT will assist in determining the bond amount if requested by the municipality.

The maximum speed limits for trucks on any town way will be 25 mph (40 km per hour) unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

Cumberland 18670.00 Blanchard Road June 9, 2016

### SPECIAL PROVISION SECTION 105 GENERAL SCOPE OF WORK (LIMITATIONS OF OPERATIONS)

13. Once operations commence, for every weekday not worked, the Contractor will be charged liquidated damages per Section 107.7.2 of the Standard Specifications, excluding days lost to inclement weather, holidays, and approved absences.

Absences must be requested at least 72 hours in advance, and are subject to Department approval based on existing roadway condition, paving deadlines, adherence to schedule, traffic restrictions, detours, etc. The Contractor must assure that the roadway surface and signage are maintained for the safe passage of the traveling public during any approved absences. The Contract Completion Date will not be modified due to approved absences.

### SPECIAL PROVISION <u>SECTION 107</u> SCHEDULING OF WORK

Replace Section 107.4.2 with the following:

<u>"107.4.2 Schedule of Work Required</u> Within 21 Days of Contract Execution and before beginning any on-site activities, the Contractor shall provide the Department with its Schedule of Work. The Contractor shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract, including QA inspection and testing, approval of the Contractor's TCP, SEWPCP and QCP, and review of Working Drawings.

At a minimum, the Schedule of Work shall include a bar chart which shows the major Work activities, milestones, durations, <u>submittals and approvals</u>, and a timeline. Milestones to be included in the schedule include: (A) start of Work, (B) beginning and ending of planned Work suspensions, (C) Completion of Physical Work, and (D) Completion. If the Contractor Plans to Complete the Work before the specified Completion date, the Schedule shall so indicate.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule. The Contractor will make the requested changes to the schedule and issue the finalized version to the Department."

### SPECIAL PROVISION <u>SECTION 107</u> PROSECUTION AND PROGRESS

(Contract Time)

This Contract shall be completed within <u>61</u> continuous calendar days. The Contractor may begin work anytime in accordance with Standard Specification 104.4.2 and upon approval of all required submittals. The Contract Completion Date will be no later than <u>December 3, 2016.</u>

At least 21 calendar days prior to the desired Begin Construction Date the Contractor shall submit an electronic copy of their signed request to begin work and the Begin Construction Date. This signed request shall be sent read receipt through email with their Schedule of Work, in accordance with Standard Specification 107.4.2, to Shawn.Smith@Maine.gov, Emory.Lovely@Maine.gov, and Scott.Bickford@Maine.gov. The Contractor shall notify all utility contacts listed in the 104 Special Provision and provide the utility contacts the submitted schedule of work within 2 calendar days of the schedule of work submittal. Upon receipt of the schedule of work, a pre-construction meeting will be scheduled. A Contract Modification will be executed to document the new Contract Completion Date based upon the Begin Construction Date. The modified Contract Completion Date shall not exceed the Contract Completion Date specified in this special provision.

The Contractor may request to adjust the submitted schedule of work and Begin Construction Date once after the initial submittal. The Department will allow adjustments in the Begin Construction Date of up to seven calendar days if the request is made at least 21 calendar days prior to the updated Begin Construction Date. This signed request shall be sent read receipt through email with their Schedule of Work, in accordance with Standard Specification 107.4.2, to Shawn.Smith@Maine.gov, Emory.Lovely@Maine.gov, and Scott.Bickford@Maine.gov. The Contractor shall notify all utility contacts listed in the 104 Special Provision and provide the utility contacts the updated schedule of work within 2 calendar days of the request to adjust the Begin Construction Date.

### SPECIAL PROVISION SECTION 401 - HOT MIX ASPHALT PAVEMENT

The Standard Specification <u>401 – Hot Mix Asphalt Pavement</u>, has been modified with the following revisions. All sections not revised by this Supplemental Specification shall be as outlined in Section 401 of the Standard Specifications.

401.18 Quality Control Method A, B & C The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.6 - Acceptance and this Section. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

- a. Method A: The Pay Factor for VMA, Voids @  $N_d$ , Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and s=0.
- b. Method B: The Pay Factor for VMA, Voids @  $N_d$ , Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.90. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and s=0.
- c. Method C: The Pay Factor for Percent PGAB, percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, percent passing 0.075 mm sieve or density using all Acceptance or all available Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, or percent passing 0.075 mm sieve if the mean test value is equal to the LSL or USL and s=0.
- d. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Table 3: Aggregate Consensus Properties Criteria in Section 703.07 for the design traffic level.
- e. Each of the first 2 control tests for a Method A or B lot fall outside the upper or lower limits for VMA, Voids @ Nd, or Percent PGAB; or under Method C, each of the first 2 control tests for the lot fall outside the upper or lower limits for the nominal maximum, 2.36 mm, 0.300 mm or 0.075 mm sieves, or percent PGAB.
- f. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.
- g. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
- h. The Contractor fails to follow the approved QCP.

401.203 Method C Lot Size will be the entire production per JMF for the project, or if so agreed at the Prepaving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 750 ton for mixture properties, 500 ton for base or binder densities and 250 ton for surface densities. The minimum number of sublots for mixture properties shall be 4, and the minimum number of sublots for density shall be five.

TABLE 7: METHOD C ACCEPTANCE LIMITS

Property	USL and LSL
Passing 4.75 mm and larger sieves	Target +/-7%
Passing 2.36 mm to 1.18 mm sieves	Target +/-5%
Passing 0.60 mm	Target +/-4%
Passing 0.30 mm to 0.075 mm sieve	Target +/-2%
PGAB Content	Target +/-0.4%
% TMD (In place density)	95.0% +/- 2.5%

### Pay Adjustment Method C

The Department will use density, Performance Graded Asphalt Binder content, and the percent passing the nominal maximum, 2.36 mm, 0.300 mm and 0.075 mm sieves for the type of HMA represented in the JMF. If the PGAB content falls below 0.80, then the PGAB pay factor shall be 0.55.

<u>Density</u>: For mixes having a density requirement, the Department will determine a pay factor using Table 7: Method C Acceptance Limits:

$$PA = (density PF- 1.0)(Q)(P)x0.50$$

<u>PGAB Content and Gradation</u> The Department will determine a pay factor using Table 7: Method C Acceptance Limits. The Department will calculate the price adjustment for Mixture Properties as follows:

 $PA = (\% \ Passing \ Nom. \ Max \ PF-1.0)(Q)(P)X0.05+(\% \ passing \ 2.36 \ mm \ PF-1.0)(Q)(P)X0.05+(\% \ passing \ 0.30 \ mm \ PF-1.0)(Q)(P)X0.05+(\% \ passing \ 0.075 \ mm \ PF-1.0)(Q)(P)X0.10+(PGAB \ PF-1.0)(Q)(P)X0.25$ 

### 401.223 Process for Dispute Resolution (Methods A B & C only)

TABLE 10: DISPUTE RESOLUTION VARIANCE LIMITS

PGAB Content	+/-0.4%
$G_{ m mb}$	+/-0.030
$G_{mm}$	+/-0.020
Voids @ N <sub>d</sub>	+/-0.8%
VMA	+/-0.8%
Passing 4.75 mm and larger sieves	+/- 4.0%
Passing 2.36 mm to 0.60 mm sieves	+/- 3.0%
Passing 0.30 mm to 0.15	+/- 2.0 %
0.075 mm sieve	+/- 0.8%

Cumberland 018670.00 Blanchard Road Pavement Preservation June 10, 2016

### SPECIAL PROVISION SECTION 403 HOT MIX ASPHALT

Desc. Of Course	Grad Design.	Item Number	Total Thick	No. Of Layers	Comp. Notes
		1 1/4" HM	A Overlay w	ith Shim	
	<u>Mainline</u>	e Travelway,	Shoulders,	& Approa	ch Roads
Wearing	9.5 mm	403.210	1 1/4"	1	1,4,8,20
Shim	9.5 mm	403.211	variable	1/more	1,2,4,8,11,14,20
		<u>D</u>	rives, Misc.		
Wearing	9.5 mm	403.209	2"	1/more	2,3,10,11,14

### **COMPLEMENTARY NOTES**

- 1. The required PGAB for this mixture will meet a **PG 64-28** grading.
- 2. The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on <u>bridge decks</u>.
- 3. The design traffic level for mix placed shall be <0.3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
- 4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
- 8. Section 106.6 Acceptance, (2) Method B. The Contractor may request a contract modification to change to testing method "A" prior to work starting on this item.
- 10. Section 106.6 Acceptance, (2) Method D.
- 11. The combined aggregate gradation required for this item shall be classified as a 9.5mm "**fine graded**" mixture, (using the Primary Control Sieve control point) as defined in 703.09.
- 14. The combined aggregate gradation required for this item shall be classified as a 9.5mm Thin Lift Mixture (TLM) mixture, using the Aggregate Gradation Control Points as defined in 703.09.
- 20. The Contractor may place the specified HMA pavement course, not to exceed 2" inch compacted depth, over the full single travel lane width, for each production day. If this option is utilized the Contractor will be required to place a matching course of HMA over the adjacent section of travel lane before the end of the following calendar day. The Contractor will also be responsible for installing additional warning signage that clearly defines the centerline elevation differential hazard. Additional centerline delineation such as double RPM application or temporary painted line shall be required for centerline depths exceeding 3/4" inch. Pavement layers 3/4" inch or less shall require a single RPM application placed on the newly placed pavement as a minimum. The Traffic Control Plan shall be amended to include this option and the additional requirements. All signs and traffic control devices will conform to Section 719.01, and Section 652, and will be installed prior to the work, at a maximum spacing of 0.50 mile for the entire length of effected roadway section. On roadways with twoway traffic, the Contractor will be required to place the specified course over the full width of the mainline traveled way being paved prior to opening the sections to weekend or holiday traffic. If this option is utilized, all additional signing, labor, traffic control devices, or incidentals will not be paid for directly, will be considered incidental to the appropriate 652 items.

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Cumberland 018670.00 Blanchard Road Pavement Preservation June 10, 2016

### Tack Coat

A tack coat of emulsified asphalt, RS-1 or RS-1h, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.030 gal/yd², and on milled pavement approximately 0.05 gal/yd² prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim /base courses and surface course as well as to any bridge membrane prior to the placement of HMA layers at a rate not to exceed 0.030 gal/yd². Tack used will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

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### SPECIAL PROVISION SECTION 652 MAINTENANCE OF TRAFFIC

Approaches Approach signing shall include the following signs as a minimum. Field conditions may warrant the use of additional signs as determined by the Resident.

Road work Next x Miles Road work 500 Feet End Road Work

Work Area At each work site, signs and channelizing devices shall be used as directed by the Resident. Signs include:

Road Work xxxx <sup>1</sup> One Lane Road Ahead Flagger Sign

Other typical signs include:

Be Prepared to Stop Low Shoulder Bump Pavement Ends

The above lists of Approach signs and Work Area signs are representative of the contract Requirements. Other sign legends may be required.

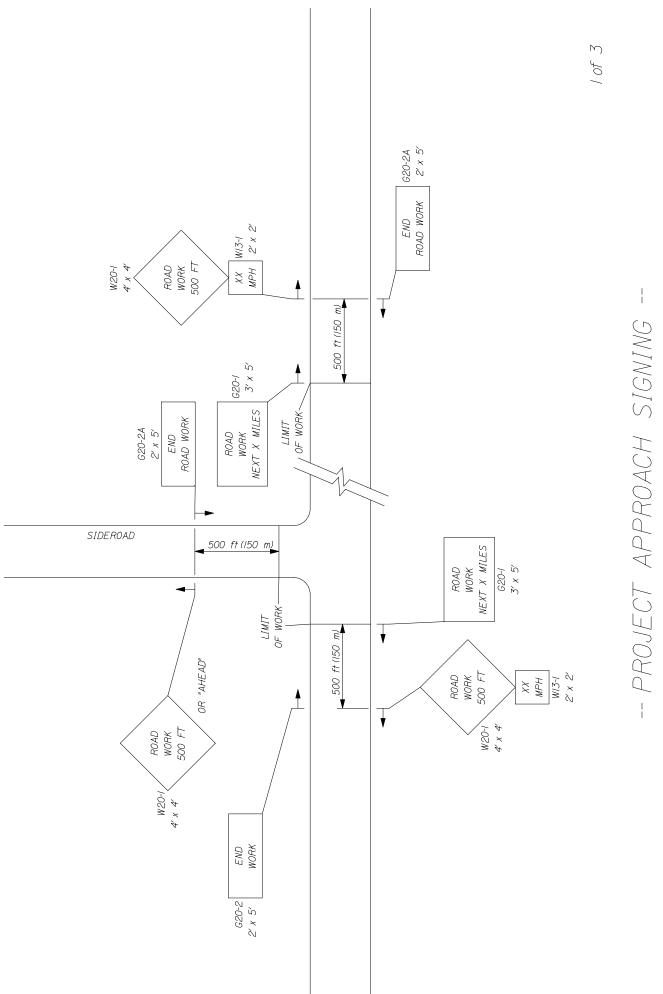
The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 800 m [2,500 ft] at each work area. To encourage quality paving in warm-weather conditions, the length can be extended to 4,000 ft depending on the traffic impacts. Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 1.6 km [1 mile] of two way operation.

<u>Temporary Centerline</u> A temporary centerline shall be placed each day on all new pavement to be used by traffic. The temporary centerline, when specified of reflectorized traffic paint, shall conform to the standard marking patterns used for permanent markings.

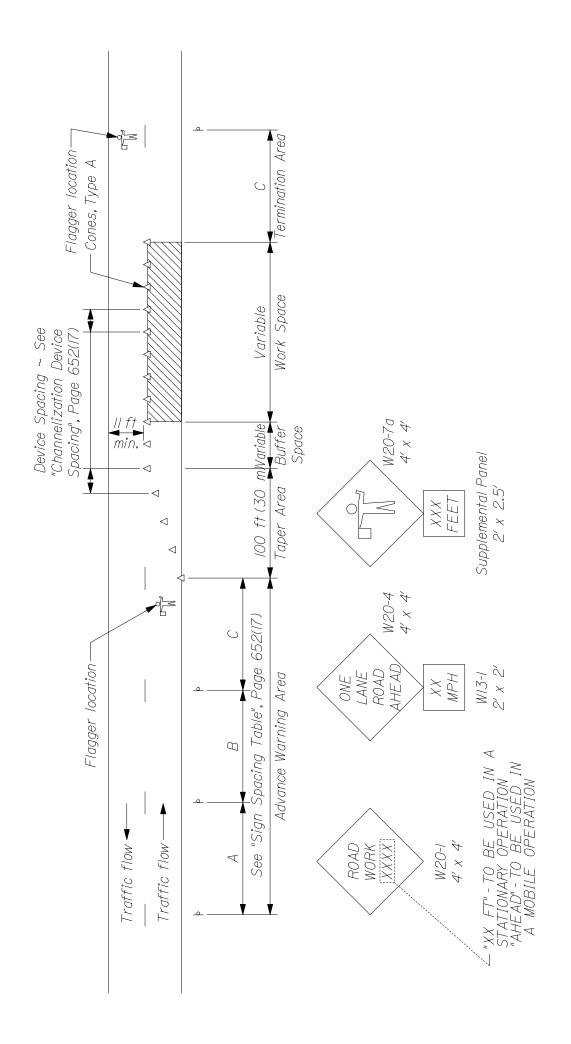
Failure to apply a temporary centerline daily will result in a Traffic Control Violation and suspension of paving operations until temporary markers are applied to all previously placed pavement.

<sup>1</sup> "Road Work Ahead" to be used in mobile operations and "Road Work xx ft" to be used in stationary
operations as directed by the Resident.

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-- PROJECT APPROACH SIGNING -- TWO WAY TRAFFIC



TYPICAL APPLICATION: TWO - WAY, TWO LANE ROADWAY, CLOSING ONE LANE USING FLAGGERS

・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・		
A minimum of 5 chan	100 ft (30 m) per lane	Downstream Taper
* Formulas for L are	100 ft (30 m) maximum	One-Lane, Two-Way Traffic Taper   100 ft (30 m) maximum
$L = WS$ $(L = \frac{WS}{16})$	at least 0.33L	Shoulder Taper
≟	at least 0.5L	Shifting Taper
$L = \frac{WS^2}{60} \qquad (L = \frac{WS^2}{4\pi \xi})$	at least L	Merging Taper
For speed limits of 40	TAPER LENGTH (L)* For speed limits of 40	TYPE OF TAPER

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eed limits of 40 mph (60 km/h) or less:

$$=\frac{WS^2}{60}$$
 (L =  $\frac{WS^2}{155}$ )

eed limits of 45 mph (70 km/h) or greater:

$$\frac{1}{2} = \frac{1}{2}$$
  $\frac{1}{2} = \frac{1}{2}$ 

WS 
$$(L = \frac{WS}{1.6})$$
  
formulas for L are as follows:

imum of 5 channelization devices shall

## CHANNELIZATION DEVICE SPACING

when used for taper channelization, and a distance in feet of 2.0 times the speed limit in mph when used for The spacing of channelization devices shall not exceed a distance equal to 1.0 times the speed limit in mph tangent channelization.

	igns**	ပ	100 (30)	350 (100)	500 (150)	1000 (300)
	Distance Between Signs**	a	100 (30)	350 (100)	500 (150)	1,500 (450)
ING TABLE	Distanc	∢	100 (30)	350 (100)	500 (150)	2,640 (800)
SIGN SPACING TABLE	T Pool	Noad Iybe	Urban 30 mph (50 km/h) or less	Urban 35 mph (55 km/h) and greater	Rural	Expressway / Urban Parkway

### GENERAL NOTES;

1. Final placement of signs and field conditions as approved by devices may be changed to fit the Resident.

\*\*Distances are shown in feet (meters).

# SUGGESTED BUFFER ZONE LENGTHS

Speed (mph)	Length (feet)	Length (feet) Speed (mph)	Length (feet)
20	115	40	325
25	155	45	360
30	200	90	425
35	250	99	495

^^	

### STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at: <a href="http://maine.gov/mdot/contractors/publications/standarddetail/">http://maine.gov/mdot/contractors/publications/standarddetail/</a>

Detail #	<u>Description</u> <u>Revision</u>	
501(02)	Pipe Pile Splice	3/05/2015
501(03)	H – Pile Splice	3/05/2015
504(07)	Diaphragm & Crossframe Notes	10/13/2015
507(13)	Steel Bridge Railing	6/03/2015
507(14)	Steel Bridge Railing	6/03/2015
507(31)	Barrier - Mounted Steel Bridge	8/06/2015
526(02)	Temporary Concrete Barrier	8/06/2015

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### SUPPLEMENTAL SPECIFICATIONS

(Corrections, Additions, & Revisions to Standard Specifications - November 2014)

### SECTION 101 CONTRACT INTERPRETATION

### 101.2 Definitions

Page 1-5 – Remove the definition of <u>Bridge</u> in its entirety and replace with:

<u>"Bridge</u> A structure that is erected over a depression or an obstruction, such as water, a highway or a railway, and has an opening measured along the centerline of the Roadway of more than 20 feet between: The faces of abutments; spring line of arches; extreme ends of openings of box culverts, pipes or pipe arches; or the extreme ends of openings for multiple box culverts, pipes or pipe arches."

Page 1-12 – Remove the definition of <u>Large Culvert</u> in its entirety and replace with:

"<u>Large Culvert</u> Any structure not defined as a Culvert or Bridge that provides a drainage or non-drainage opening under the Roadway or Approaches to the Roadway, with an opening that is 5 feet but less than 10 feet."

Remove the definition of Minor Span in its entirety and replace with:

"Minor Span Same definition as Bridge, except having an opening of between 10 feet and 20 feet, inclusive."

### SECTION 104 GENERAL RIGHTS AND RESPONSIBILITES

This Section shall be amended by adding the following sub-section:

104.3.8.1 Electronic Payroll Submission On federally funded projects, the prime contractor and all subcontractors and lower-tier subcontractors will submit their certified payrolls electronically utilizing the Elation System web based reporting. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at <a href="http://www.maine.gov/mdot/contractors/">http://www.maine.gov/mdot/contractors/</a> under the "Notices!" Electronic Payroll System Training & Implementation dated 10/4/2013.

104.4.10 Coordination of Road Closure / Bridge Closure / Bridge Width Restrictions
Revise the last sentence by adding a period after 'Resident'; remove the "and" after Resident; and adding "not covered by Pay Items" between 'costs' and 'will'. So that the last paragraph reads "All Newspaper notices, radio announcements and any notifications will be subject to the approval of the Resident. All costs not covered by Pay Items will be considered incidental to the Contract."

104.5.5 Prompt Payment of Subcontractors Add the following paragraph to this subsection:

C. Payment Tracking Federal Projects On federally funded projects, the prime contractor, subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System. They will be responsible for entering all payments to all sub and lower tier contractors. MaineDOT will run a query monthly to ensure that contractors are complying and generate an e-mail to contractors who have not responded to confirm receipt of MaineDOT payment or contractor payment to lower tier subcontractors.

### SECTION 105 GENERAL SCOPE OF WORK

105.4.5 Special Detours Remove this subsection in its entirety and replace with: "105.4.5 Maintenance of Existing Structures When a new Bridge or Minor Span is being installed on a new alignment and the existing structure is to remain in service, the Department will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours, prior to removal of the existing structure. In this case, the Department will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but not limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others."

105.6.2.4 Department Verification Add the following to the end of the first sentence: "or other approved method, such as reference staking, to allow the Department to independently verify the accuracy of the work, as approved by the Department."

### SECTION 106 QUALITY

106.4.1 General - In the first sentence, remove "When required by Special Provision," and replace with "When required elsewhere in the Contract,"

### SECTION 108 PAYMENT

<u>108.3 Retainage</u> - Remove the paragraph beginning with "The Contractor may withdraw..."

### 108.4.1 Price Adjustment for Hot Mix Asphalt:

Remove this section in its entirety and replace with the following

For all contracts with hot mix asphalt in excess of 500 tons total, a price adjustment for performance graded binder will be made for the following pay items:

Item 403.102	Hot Mix Asphalt – Special Areas
Item 403.206	Hot Mix Asphalt - 25 mm
Item 403.207	Hot Mix Asphalt - 19 mm
Item 403.2071	Hot Mix Asphalt - 19 mm (Polymer Modified)
Item 403.2072	Hot Mix Asphalt - 19 mm (Asphalt Rich Base)
Item 403.208	Hot Mix Asphalt - 12.5 mm
Item 403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)
Item 403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)
Item 403.210	Hot Mix Asphalt - 9.5 mm
Item 403.2101	Hot Mix Asphalt - 9.5 mm (Polymer Modified)
Item 403.2102	Hot Mix Asphalt - 9.5 mm (Asphalt Rich Base)
Item 403.2104	Hot Mix Asphalt - 9.5 mm (Thin Lift Surface Treatment)
Item 403.21041	Hot Mix Asphalt - 9.5 mm (Polymer Modified Thin Lift Surface
<b>Treatment</b> )	· · ·
Item 403.211	Hot Mix Asphalt – Shim
Item 403.2111	Hot Mix Asphalt – Shim (Polymer Modified)
Item 403.212	Hot Mix Asphalt - 4.75 mm (Shim)
Item 403.213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)
Item 403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer
<b>Modified</b> )	•
Item 403.2132	Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate
course)	
Item 403.214	Hot Mix Asphalt - 4.75 mm (Surface)
Item 403.235	Hot Mix Asphalt (High Performance Rubberized HMA)
Item 403.301	Hot Mix Asphalt (Asphalt Rubber Gap-Graded)
Item 404.70	Colored Hot Mix Asphalt – 9.5mm (Surface)
Item 404.72	Colored Hot Mix Asphalt – 9.5mm (Islands, sidewalks, & incidentals)
Item 461.13	Light Capital Pavement
Item 462.30	Ultra-Thin Bonded Wearing Course
Item 462.301	Polymer Modified Ultra-Thin Bonded Wearing Course
	-

Price adjustments will be based on the variance in costs for the performance graded binder component of hot mix asphalt. They will be determined as follows:

The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.

Item 403.102-6.2% Item 403.206-4.8% Item 403.207-5.2% Item 403.2071-5.2% Item 403.2072-5.8% Item 403.208-5.6% Item 403.2081-5.6% Item 403.209-6.2% Item 403.210-6.2% Item 403.2101–6.2% Item 403.2102-6.8% Item 403.2104-6.2% Item 403.21041-6.2% Item 403.211–6.2% Item 403.2111-6.2% Item 403.212-6.8% Item 403.213-5.6% Item 403.2131-5.6% Item 403.2132-6.2% Item 403.214-6.8% Item 403.235-5.5% Item 403.301-6.2% Item 404.70-6.2% Item 404.72-6.2% Item 461.13–6.5% Item 462.30-0.0021 tons/SY Item 462.301–0.0021 tons/SY

**Hot Mix Asphalt:** The quantity of hot mix asphalt will be determined from the quantity shown on the progress estimate for each pay period.

<u>Base Price</u>: The base price of performance graded binder to be used is the price per standard ton current with the bid opening date. This price is determined by using the average New England Selling Price (Excluding the Connecticut market area), as listed in the Asphalt Weekly Monitor.

<u>Period Price</u>: The period price of performance graded binder will be determined by the Department by using the average New England Selling Price (Excluding the Connecticut market area), listed in the Asphalt Weekly Monitor current with the paving date. The maximum Period Price for paving after the adjusted Contract Completion Date will be the Period Price on the adjusted Contract Completion Date.

### SECTION 109 CHANGES

### 109.5.1 Definitions - Types of Delays

Delete Paragraph 'A' in its entirety and replace with:

"A. Excusable Delay Except as expressly provided otherwise by this Contract, an "Excusable Delay" is a Delay to the Critical Path that is directly and solely caused by (1) a weather related Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an adjustment of time if the Project falls within the geographic boundaries prescribed under the disaster declaration. or (2) a flooding event at the effected location of the Project that results in a Q25 headwater elevation, or greater, but less than a Q50 headwater elevation. Theoretical headwater elevations will be determined by the Department; actual headwater elevations will be determined by the Contractor and verified by the Department or (3) An Uncontrollable Event."

### **APPENDIX A TO DIVISION 100**

Remove Section D in its entirety as this is now covered in Section 105.10 <u>EQUAL</u> OPPORTUNITY AND CIVIL RIGHTS.

### SECTION 203 EXCAVATION AND EMBANKMENT

### 203.02 Materials

At the bottom of page 2-12, add as the first item in the list:

Crushed Stone, <sup>3</sup>/<sub>4</sub> inch 703.13

### 203.042 Rock Excavation and Blasting

On page 2-16, add the word "**No**" to the third sentence in Section 5 Submittals, Subsection V, 1 so that it reads:

"No blasting products will be allowed on the job site if the date codes are missing."

### SECTION 304 AGGREGATE BASE AND SUBBASE COURSE

### 304.02 Aggregate

Remove the sentence "Aggregate for base and subbase courses shall be material meeting the aggregate type requirements specified in the following table" in its entirety and the table that follows it with headings of 'Material' and 'Aggregate Type'.

<u>304.02 – Aggregate</u> Add the following sentence before the sentence starting with "When designated on the plans...": "Aggregate Base Course – Type C will be capped with 2" of millings or Untreated Aggregate Surface Course – Type B. Payment for this material will be made under 304.16"

### SECTION 307 FULL DEPTH RECYCLED PAVEMENT

Remove this Section in its entirety and replace with:

### SECTION 307 FULL DEPTH RECYCLING (UNTREATED OR TREATED WITH EMULSIFIED ASPHALT STABILIZER)

<u>307.01 Description</u> This work shall consist of pulverizing a portion of the existing roadway structure into a homogenous mass, adding an emulsified asphalt stabilizer (if required) to the depth of the pulverized material specified in the contract, placing and compacting this material to the lines, grades, and dimensions shown on the plans or established by the Resident.

### **MATERIALS**

<u>307.02 Pulverized Material</u> Pulverized material shall consist of the existing asphalt pavement layers and one inch or more as specified of the underlying gravel, pulverized and blended into a homogenous mass. Pulverized material will be processed to 100% passing a 2 inch square mesh sieve.

307.021 New Aggregate and Additional Recycled Material New aggregate, if required by the contract, shall meet the requirements of Subsection 703.10 - Aggregate for Untreated Surface Course and Leveling Course, Type A. Aggregate Subbase Course Gravel Type D processed to 100 percent passing a 2 inch square mesh sieve and meeting the requirements of 703.06 – Aggregate for Base and Subbase may be used in areas requiring depths greater than 2 inches. New aggregate, will be measured and paid for under the appropriate item.

Recycled material, if required, shall consist of salvaged asphalt material from the project or from off-site stockpiles that has been processed before use to 100 percent passing a 2 inch square mesh sieve. Recycled material shall be conditionally accepted at the source by the Resident. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

Recycled material generated and salvaged from the project shall be used within the roadway limits to the extent it is available as described in 307.09. No additional payment will be made for material salvaged from the project.

Recycled material supplied from off-site stockpiles shall be paid for as described in the contract, or by contract modification.

<u>307.022 Emulsified Asphalt Stabilizer</u>. If required, the emulsified asphalt stabilizer shall be grade MS-2, MS-4, SS-1, or CSS-1 meeting the requirements of Subsection 702.04 Emulsified Asphalt.

<u>307.023 Water</u> Water shall be clean and free from deleterious concentrations of acids, alkalis, salts or other organic or chemical substances.

<u>307.024 Portland Cement</u> If required, Portland Cement shall be Type I or II meeting the requirements of AASHTO M85.

307.025 Hydrated Lime If required, Hydrated Lime shall meet the requirements of AASHTO M216.

### **EQUIPMENT**

307.03 Pulverizer The pulverizer shall be a self-propelled machine, specifically manufactured for full-depth recycling work and capable of reducing the required existing materials to a size that will pass a 2 inch square mesh sieve. The machine shall be equipped with standard automatic depth controls and must maintain a consistent cutting depth and width. The machine also shall be equipped with a gauge to show depth of material being processed.

<u>307.04 Liquid Mixer Unit or Distributor</u>. If treatment of the recycled layer with emulsified asphalt is required by the contract, a liquid mixing unit or distributor shall be used to introduce the emulsified asphalt stabilizer into the pulverized material. The mixing unit shall contain a liquid distribution and mixing system which has been specifically manufactured for full-depth recycling work, capable of mixing the pulverized material with an evenly metered distribution of emulsified asphalt into a homogeneous mixture, to the depth and width required.

The mixing unit shall be designed, equipped, maintained, and operated so that emulsified asphalt stabilizer at constant temperature may be applied uniformly on variable widths of pulverized material up to 6 feet at readily determined and controlled rates from 0.01 to 1.06 gal/yd² with uniform pressure and with an allowable variation from any specified rate not to exceed 0.01 gal/yd². Mixing units shall include a tachometer, pressure gages, and accurate volume measuring devices or a calibrated tank and a thermometer for measuring temperatures of tank contents.

307.041 Cement or Lime Spreader If required by the contract, spreading of the Portland Cement or Hydrated Lime shall be done with a spreader truck designed to spread dry particulate (such as Portland Cement or Lime) or other approved means to insure a uniform distribution across the roadway and minimize fugitive dust. Pneumatic application, including through a slotted pipe, will not be permitted. Other systems that have been developed include fog systems, vacuum systems, etc. Slurry applications may also be accepted. The Department reserves the right to accept or reject the method of spreading cement. The Contractor shall provide a method for verifying that the correct amount of cement is being applied.

307.05 Placement Equipment Placement of the Full Depth recycled material to the required slope and grade shall be done with an approved highway grader or by another method approved by the Resident.

307.06 Rollers The full depth recycled material shall be rolled with a vibratory pad foot roller, a vibratory steel drum soil compactor and a pneumatic tire roller. The pad foot roller drum shall have a minimum of 112 tamping feet 3 inches in height, a minimum contact area per foot of 17 inch<sup>2</sup>, and a minimum width of 84 inches. The vibratory steel drum roller shall have a minimum 84 inch width single drum. The pneumatic tire roller shall meet the requirements of Section 401.10 and the minimum allowable tire pressure shall be 85 psi.

### MIX DESIGN

If treatment of the recycled layer with emulsified asphalt is required by the contract, the Department will supply a mix design for the emulsified asphalt stabilized material based on test results from pavement and soil analysis taken to the design depth. The Department will provide the following information prior to construction:

- 1. Percent of emulsified asphalt to be used.
- 2. Quantity of lime or cement to be added.
- 3. Optimum moisture content for proper compaction.
- 4. Additional aggregate (if required).

After a test strip has been completed or as the work progresses, it may be necessary for the Resident to make necessary adjustments to the mix design. Changes to compensation will be in accordance with the Mix Design Special Provision.

### CONSTRUCTION REQUIREMENTS

<u>307.06 Pulverizing</u> The entire depth of existing pavement shall be pulverized together with 1 inch or more of the underlying gravel into a homogenous mass. All pulverizing shall be done with equipment that will provide a homogenous mass of pulverized material, processed in-place, which will pass a 2 inch square mesh sieve.

### 307.07 Weather Limitations Full depth recycled work shall be performed when;

- A. Recycling operations will be allowed between May 15<sup>th</sup> and September 15<sup>th</sup> inclusive in Zone 1 Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- B. The atmospheric temperature, as determined by an approved thermometer placed in the shade at the recycling location, is 50°F and rising.
- C. When there is no standing water on the surface.
- D. During generally dry conditions, or when weather conditions are such that proper pulverizing, mixing, grading, finishing and curing can be obtained using proper procedures, and when compaction can be accomplished as determined by the Resident.
- E. When the surface is not frozen and when overnight temperatures are expected to be above 32°F.

F. Wind conditions are such that the spreading of lime or cement on the roadway ahead of the recycling machine will not adversely affect the operation.

307.08 Surface Tolerance The complete surface of the Full Depth Recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of 3/8 inch.

307.09 Full Depth Recycling Procedure New aggregate or recycled material meeting the requirements of Section 307.021 - New Aggregate and Additional Recycled Material, shall be added as necessary to restore cross-slope and/or grade before pulverizing. Locations will be shown on the plans or described in the construction notes. The Resident may add other locations while construction of the project is in progress. The Contractor will use recycled material to the extent it is available, in lieu of new aggregate. The material shall then be pulverized, processed, and blended into a homogeneous mass passing a 2 inch square mesh sieve. Material found not pulverized down to a 2 inch size will be required to be reprocessed by the recycler with successive passes until approved by the Resident.

Should the Contractor be required to add new aggregate or recycled material to restore cross-slope and/or grade after the initial pulverizing process, those areas will require reprocessing to blend into a homogenous mass passing a 2 in square mesh sieve.

Sufficient water shall be added during the recycling process to maintain optimum moisture for compaction.

The resultant material from the initial pulverizing processes shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade. The completed surface of the full depth recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of 3% inch. Areas not meeting this tolerance will be repaired as described in Section 307.091. The initial pulverizing process density requirements will be the same as Section 307.101 unless otherwise directed by the Resident.

Additives, if required, shall be introduced following completion of the initial pulverizing and blending process. Emulsified asphalt stabilizer shall be incorporated into the top of the processed material as specified in section 307.04 to the depth specified in the contract by use of the liquid mixer unit or a distributor, at the rate specified in the mix design. The emulsified asphalt shall then be uniformly blended into a homogeneous mass until an apparent uniform distribution has occurred. The rate of application may be adjusted as necessary by the Resident.

Cement or lime shall be introduced as described in section <u>307.041</u>. The resultant material shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for reestablishing the existing profile grade.

After final compaction, the roadway surface shall be treated with a light application of water, and rolled with pneumatic-tired rollers to create a close-knit texture. The finished layer shall be free from:

- A. Surface laminations.
- B. Segregation of fine and coarse aggregate.
- C. Corrugations, centerline differential, potholes, or any other defects that may adversely affect the performance of the layer, or any layers to be placed upon it.

The Contractor shall protect and maintain the recycled layer until a lift of pavement is applied. Any damage or defects in the layer shall be repaired immediately. An even and uniform surface shall be maintained. The recycled surface shall be swept prior to hot mix asphalt overlay placement.

307.091 Repairs Repairs and maintenance of the recycled layers, resulting from damage caused by traffic, weather or environmental conditions, or resulting from damage caused by the Contractor's operations or equipment, shall be completed at no additional cost to the Department.

For recycled layers stabilized with emulsified asphalt, low areas will be repaired using a hot mix asphalt shim. Areas up to 1 inch high can be repaired by milling or shimming with hot mix asphalt. Areas greater than 1 inch high will be repaired using a hot mix asphalt shim. All repair work will be done with the Resident's approval at the Contractor's expense.

### **TESTING REQUIREMENTS**

<u>307.10 Quality Control</u> The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.4 - Quality Control and this Section. The Contractor shall not begin recycling operations until the Department approves the QCP in writing.

Prior to performing any recycling process, the Department and the Contractor shall hold a Pre-recycle conference to discuss the recycling schedule, type and amount of equipment to be used, sequence of operations, and traffic control. A copy of the QC random numbers to be used on the project shall be provided to the Resident. All field supervisors including the responsible onsite recycling process supervisor shall attend this meeting.

The QCP shall address any items that affect the quality of the Recycling Process including, but not limited to, the following:

A. Sources for all materials, including New Aggregate and Additional Recycled Material.

- B. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.
- C. Testing Plan.
- D. Recycling operations including recycling speed, methods to ensure that segregation is minimized, grading and compacting operations.
- E. Methods for protecting the finished product from damage and procedures for any necessary corrective action.
- F. Method of grade checks.
- G. Examples of Quality Control forms.
- H. Name, responsibilities, and qualifications of the Responsible onsite Recycling Supervisor experienced and knowledgeable with the process.
- I. A note that all testing will be done in accordance with AASHTO and MDOT/ACM procedures.

The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The Contractor shall sample, test, and evaluate the full depth reclamation process in accordance with the following minimum frequencies:

### **Frequency Test or Action Test Method Density** 1 per 1000 feet / lane **AASHTO T** 310 Air Temperature 4 per day at even intervals **Surface Temperature** At the beginning and end of each days operation 1 per 1000 ft/lane Yield of all materials (Daily yield, yield since last test, and total project yield.)

### MINIMUM QUALITY CONTROL FREQUENCIES

The Department may view any QC test and request a QC test at any time. The Contractor shall submit all QC test reports and summaries in writing, signed by the appropriate technician, to the Department's onsite representative by 1:00 P.M. on the next working day, except when otherwise noted in the QCP due to local restrictions. The Contractor shall make all test results, including randomly sampled densities, available to the Department onsite.

The Contractor shall cease recycling operations whenever one of the following occurs:

- A. The Contractor fails to follow the approved QCP.
- B. The Contractor fails to achieve 98 percent density after corrective action has been taken.
- C. The finished product is visually defective, as determined by the Resident.
- D. The computed yield differs from the mix design by 10 percent or more.

Recycling operations shall not resume until the Department approves the corrective action to be taken.

<u>307.101 Test Strip</u> The contractor shall assemble all items of equipment for the recycling operation on the first day of the recycling work. The Contractor shall construct a test strip for the project at a location approved by the Resident. The Responsible onsite Recycling Supervisor will work with Department personnel to determine the suitability of the mixed material, moisture control within the mixed material, and compaction and surface finish. The test strip section is required to:

- A. Demonstrate that the equipment and processes can produce recycled layers to meet the requirements specified in these special provisions.
- B. Determine the effect on the gradation of the recycled material by varying the forward speed of the recycling machine and the rotation rate of the milling drum.
- C. Determine the optimum moisture necessary to achieve proper compaction of the recycled layer.
- D. Determine the sequence and manner of rolling necessary to obtain the compaction requirements and establish a target density. The Contractor and the Department will both conduct testing with their respective gauges at this time.

The test strip shall be at least 300 feet in length of a full lane-width (or a half-road width). Full recycling production will not start until a passing test strip has been accomplished. If a test strip fails to meet the requirements of this specification, the Contractor will be required to repair or replace the test strip to the satisfaction of the Resident. Any repairs, replacement, or duplication of the test strip will be at the Contractor's expense.

After the test strip has been pulverized, and the roadway brought to proper shape, the Contractor shall add water until it is determined that optimum moisture has been obtained. The test strip shall then be rolled using the specified compaction equipment as directed until the density readings show an increase in dry density of less than 1 pcf for the final four roller passes of each roller. The Contractor and Department will each determine a target density using their respective gauges by performing several additional density tests and averaging them. The average of these tests will be used as the target density of the recycled material for QC and Acceptance purposes.

Following completion of the test strip, compaction of the material shall continue until a density of not less than 98 percent of the test strip target density has been achieved for the full width and depth of the layer. During the construction and compaction of the Full Depth Recycled base, should three consecutive Acceptance test results for density fail to meet a minimum of 95 percent of the target density, or exceed 102 percent of target density, a new test strip shall be constructed.

#### ACCEPTANCE TEST FREQUENCY

Property	Frequency	Test Method	
In-place Density	1 per 2000 ft / lane	AASHTO T 310	

<u>308.102 Curing</u>. No new pavement shall be placed on the full depth recycled pavement until curing has reduced the moisture content to 1 percent or less by total weight of the mixture, or a curing period of 4 days has elapsed, whichever comes first.

**307.11 Method of Measurement** Full Depth Recycled Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be measured by the square yard.

307.12 Basis of Payment The accepted quantity of Full Depth Recycled Asphalt Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be paid for at the contract unit price per square yard, complete in-place which price will be full compensation for furnishing all equipment, materials and labor for pulverizing, blending, placing, grading, compacting, and for all incidentals necessary to complete the work.

The addition of materials to restore profile grade and/or cross-slope in areas shown on the plans or described in the construction notes will be paid separately under designated pay items within the contract. No additional payment will be made for materials salvaged from the project.

Payments will be made under:

<u>Pay Item</u>	Pay Unit
307.331 Full Depth Recycled Pavement (Untreated) Yard	Square
307.332 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 5 in. depth Yard	Square
307.333 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 6 in. depth Yard	Square

## SECTION 411 UNTREATED AGGRAGATE SURFACE COURSE

411.02 – Aggregate Add the following to the end of the first sentence: "- Type A"

## SECTION 501 FOUNDATION PILES

#### 501.05 – Method of Measurement

- b. <u>Piles Furnished</u> After the second sentence, add the sentence "**Measurement will not include any pile tips**".
- c. <u>Piles in Place</u> Add the sentence to the end of the second paragraph, "**Measurement will include the pile tips**".
- d. <u>Pile Tips</u> Add the words "**on the Pile**" to the end of the sentence.

## SECTION 502 STRUCTURAL CONCRETE

### 502.05 Composition and Proportioning

Replace Table 1 with

TABLE 1

Concrete	Minimum	Permeability	Entrained		Notes
CLASS	Compressive	as indicated	Air		
	Strength	by Surface	(%)		
	(PSI)	Resistivity			
		(KOhm-cm)			
		LSL	LSL	USL	
S	3,000	N/A	N/A	N/A	4,5
A	4,000	14	6.0	9.0	1,4,5
P			5.5	7.5	1,2,3,4
LP	5,000	17	6.0	9.0	1,4,5
Fill	3,000	N/A	6.0	9.0	4,5

In the list of information submitted by the contractor for a mix design:

Item J Replace "Target Coulomb Value." with "Target KOhm-cm Value."

Note #1 - Remove, "...Standard Specification Section 711.05, Protective Coating for Concrete Surfaces, and per the manufacturer's recommendations, at no additional cost to the Department." and replace with, "...Standard Specification Section 515, Protective Coating for Concrete Surfaces, at no additional cost to the Department."

#### 502.1703 Acceptance Methods A and B

In the paragraph that starts with "The Department will take Acceptance..." Remove the word chloride from chloride permeability in the last sentence.

Replace the paragraph starting with "Rapid Chloride Permeability specimens..." With the following:

"Surface Resistivity specimens will be tested by the Department in accordance with AASHTO TP-95 at an age  $\geq$  56 days. Four 4 inch x 8 inch cylinders will be cast per sublot placed. The average of three concrete specimens per sublot will constitute a test result and this average will be used to determine the permeability for pay adjustment computations."

#### 502.1706 Acceptance Method C

Remove in its entirety and Replace with:

502.1706 Acceptance Method C The Department will determine the acceptability of the concrete through Acceptance testing. Acceptance tests will include compressive strength, air content and permeability. Method C concrete not meeting the requirements listed in Table 1 shall be removed and replaced at no cost to the Department. At the Department's sole discretion, material not meeting requirements may be left in place and paid for at a reduced price as described in Section 502.195.

#### 502.1707 Resolution of Disputed Acceptance Test Results

Section B

Remove "Rapid Chloride" from the section heading. In paragraph 4 replace T-277 with TP-95

#### 502.192 Pay Adjustment for Chloride Permeability

Remove "Chloride" from the heading and from the first sentence.

Replace the sentence that starts with "values greater than..." and replace with "values less than 10 KOhms-cm for Class A concrete or 11 KOhms-cm for Class LP concrete shall be subject to rejection and replacement, at no additional cost to the Department."

## 502.194 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content, Methods A and B

Remove the word "Chloride" from the section heading and from the equation for CPF.

#### 502.195 Pay Adjustment Method C

In Table 6: Method C Pay Reductions (page 5-53) Under "Entrained Air" for "Class Fill", in the first line, change from "< 4.0 (Removal)" to "< 4.5 (Removal)" In Table 6: Method C PAY REDUCTIONS, revise the Chloride Permeability section by removing it in its entirety and replacing it with:

Surface Resistivity {Permeability in Kohm-cms and Pay Reduction per CY}			
15-16 (\$50)	13 (\$25)	N/A	N/A
13-14 (\$75)	12(\$50)	N/A	N/A
12 (\$100)	11 (\$75)	N/A	N/A
11 (\$125)	10 (\$100)	N/A	N/A
< 11 (Removal)	< 10 (Removal)	N/A	N/A

## SECTION 504 STRUCTURAL STEEL

<u>504.26 Welding</u> Remove the second paragraph beginning with "The range of heat...." in its entirety.

504.29 Welding ASTM A 709 HPS 70W Steel. Remove the third paragraph beginning with "Make Weld runoff tabs..." in its entirety.

## SECTION 527 ENERGY ABSORBING UNIT

527.02 Materials This section is revised to read as follows.

<u>527.02 Materials</u> Work Zone Crash Cushions must comply with NCHRP Report 350. Work Zone Crash Cushions shall be selected from MaineDOT's Qualified Products List of Crash Cushions / Impact Attenuators, or an approved equal.

# SECTION 534 PRECAST STRUCTURAL CONCRETE

534.14 Process Control Test Cylinders

Revise this subsection to read:

"534.14 Acceptance and Quality Control Testing of Concrete Refer to Section 712.061."

# SECTION 535 PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

Section 535.08 – Quality Assurance

Revise the second paragraph to read:

"The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents."

#### Section 535.15 - Process Control Test Cylinders

Revise the first paragraph to read:

"535.15 Acceptance and Quality Control Testing of Concrete Acceptance of structural precast/prestressed units, for each day's production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results. At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All testing equipment required by the QAI to perform this testing shall be provided in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made."

Insert the following as the second paragraph of Section 535.15:

"Quality Control concrete test cylinders shall be made for each day's cast and each form bed used. Cylinders tested to determine strand release strength and design strength shall be field cured in accordance with AASHTO T23 (ASTM C31). 28 day cylinders shall be standard cured. Record unit identification, entrained air content, water-cement ratio, slump flow and temperature of the sampled concrete at the time of cylinder casting."

# SECTION 604 MANHOLES, INLETS CATCH BASINS

604.04 Adjusting Catch Basins and Manholes,

Add the following paragraph to the end of 604.04 b:

The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.

Add the following paragraph after the first paragraph of 604.04 c:

The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.

Add the following sections to 604.04:

d. Ring Insert Requirements Ring inserts to adjust manhole top frame slope and grade will are allowed in accordance with the following requirements:

- 1) Materials
- i. All ring inserts must be made of iron. *Multiple ring inserts will not be allowed*. The single ring insert may be any height up to a maximum of 2 inches tall.
- ii. Ring inserts shall not be welded to the manhole frame to prevent brittle failure of the cast iron frame.
- iii. Ring inserts shall be fastened to the manhole frame using liquid steel-filled epoxy such as Loctite Fixmaster Steel Liquid or equivalent. The epoxy shall be installed in accordance with the manufacturer's recommendations.
  - 2) Where Ring Inserts May/May Not Be Used
    - i. MaineDOT will allow the use of a single manhole ring insert to raise manholes on state and state-aid highways.
    - ii. Manhole ring inserts may not be used along state and state-aid highway sections where the speed limit is 40 miles per hour or more. The standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.
  - 3) Construction Requirements For The Use of Iron Manhole Ring Inserts
    - i. Wherever iron ring inserts are used to raise manhole top elevations, the rings shall be fastened to the existing manhole frame using liquid steel-filled epoxy. The liquid steel-filled epoxy shall be placed evenly around the entire manhole frame before placing the ring insert. *Unbonded ring inserts will not be allowed*. If the manufacturer's recommended construction practices result in loose or unacceptable manhole cover restraint, standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.

e. Composite Riser Requirements Flat or beveled, doughnut-shaped, composite risers placed beneath the manhole frame to adjust slope and grade are allowed. The composite riser shall be fastened to both the top of the concrete cone and bottom of the manhole frame with the manufacturer's recommended epoxy. Composite risers may be used at all locations on state and state-aid highways under any legal speed limit without restriction.

### SECTION 606 GUARDRAIL

<u>606.09 Basis of Payment</u> Amend the first sentence of the eighth paragraph of this subsection by removing the word "meter" and replace it with "linear foot".

### SECTION 619 MULCH

#### 619.07 Basis of Payment

In the list of Pay Items add "619.12 Mulch" with a Pay Unit of "Unit". Change the description of 619.1201 from "Mulch" to "Mulch – Plan Quantity"

In the list of Pay Items add "619.13 Bark Mulch" with a Pay Unit of "cubic yard". Change the description of 619.1301 from "Bark Mulch" to "Mulch – Plan Quantity"

In the list of Pay Items add "619.14 Erosion Control Mix" with a Pay Unit of "cubic yard "

Change the description of 619.1401 from "Erosion Control Mix" to "Mulch – Plan Quantity"

## SECTION 621 LANDSCAPING

#### 621.0002 Materials - General

In the list of items change "Organic Humus" to "Humus".

#### 621.0019 Plant Pits and Beds

c Class A Planting

In the third paragraph beginning with "The plant pit..." change "½ inch" to "1 inch"

## SECTION 626 FOUNDATIONS, CONDUIT AND JUNTION BOXES FOR HIGHWAY SIGNING, LIGHTING AND SIGNALS

<u>626.033 Polyvinylchloride Conduit Installation</u> Amend the following subsection by adding the following paragraph to its end:

#### "NON-METALLIC UNDER PAVEMENT CONDUIT INSTALLATION

Where noted on the drawings, non-metallic under pavement conduit of schedule 80 or greater rating shall be provided to facilitate conduit crossing of the existing highway and ramps without disruption to the existing highway and ramp pavement surface. The non-metallic under pavement conduit shall be hydraulically jacked or directional bored below the highway and ramp at a depth of not less than (36 inches). Under pavement conduit shall extend for a distance of (10 feet) beyond the highway or ramp edge at each side."

#### 626.034 Concrete Foundations

On Page 6-85, add the following paragraph before the paragraph beginning with "Drilled shafts shall not be...".

"No foundation design will be required for 18- and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. A foundation design prepared by a Professional Engineer licensed in accordance with the laws of the State of Maine will be required for all other foundations Precast foundations will be permitted for 18 and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. Where precast foundations are permitted flowable concrete fill shall be used as backfill in the annular space, and placed from the bottom up. Construction of precast foundations shall conform to the Standard Details and all requirements of Section 712.061 except that the concrete shall have a minimum permeability of 17 kOhmcm and the use of calcium nitrite will not be required. "

On Page 6-86, add the following to the paragraph beginning with "Concrete for drilled shafts..." so that it reads as follows:

"....The Contractor shall provide temporary dewatering of excavations for foundations such that concrete is placed in the dry. Concrete for drilled shafts shall be placed in accordance with Section 502.10 as temporary casing is withdrawn to prevent debris from contaminating the foundation and to ensure concrete is cast against the surrounding soil. Concrete for drilled shafts and spread footings shall be Class A in accordance with Section 502 - Structural Concrete. Precast foundations will not be permitted except as specified above in this Section. Backfill for spread footing foundations shall be Gravel Borrow meeting the requirements of Section 703.20 - Gravel Borrow...."

<u>626.05 Basis of Payment</u> Amend this subsection by adding the following paragraph and Pay Item:

"Payment will be made for the total number of linear feet of under payement conduit actually furnished, installed and accepted at the contract price per linear foot. This price shall include the cost of: furnishing and installing the conduit; excavating; furnishing special backfilling materials, pull wire, fittings, grounding and bonding; test cleaning interiors of conduits and all materials, labor, equipment and incidentals necessary to complete the work."

Pay Item
626.251 Non-Metallic Under pavement Conduit
(Schedule 80 or greater rating)

**Pay Unit** Linear Foot

## SECTION 627 PAVEMENT MARKINGS

627.10 Basis of Payment Remove the existing "627.78 Temporary Pavement Marking Line, White or Yellow" and replace with: 627.78 TEMP 4" PAINT PVMT MARK LINE W OR Y LF

## SECTION 652 MAINTENANCE OF TRAFFIC

652.3.3 Submittal of Traffic Control Plan On page 6-148, note f, in the last sentence revise the "105.2.2" to "105.2.3" so that the last sentence reads, "For a related provision, see Section 105.2.3 – Project Specific Emergency Planning.".

<u>652.3.4 General</u> Revise the eighth paragraph by removing "Earth Berm" and replace it with "Concrete Barrier".

652.4 Flaggers In the first paragraph, revise the fifth sentence which says:

For nighttime conditions, Class 3 apparel, meeting ANSI 107-2004, shall be worn along with a hardhat with 360° retro-reflectivity.

So that it reads:

For nighttime conditions, Class 3 apparel, meeting ANSI 107-2004, including a Class 3 top (vest, shirt or jacket) and a Class E bottom (pants or coveralls), shall be worn along with a hardhat with  $360\,^{\circ}$  retro-reflectivity.

#### 652.41 TRAFFIC OFFICERS

Revise this subsection so that the subsection number and title is "652.4.1 TRAFFIC OFFICERS"

# SECTION 656 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

<u>656.5.2 If No Pay Item</u> Add the following to the end of the first paragraph:

"Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 will result in a violation letter and a reduction in payment as shown in the schedule list in 656.5.1. The Department's Resident or any other representative of The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

## SECTION 660 ON-THE-JOB TRAINING

#### 660.06 Method of Measurement

Remove the first sentence in its entirety and replace with "The OJT item will be measured by the number of OJT hours by a trainee who has successfully completed an approved training program."

#### 660.07 Basis of payment to the Contractor

Remove the last word in the first sentence so that the first sentence reads "The OJT shall be paid for once successfully completed at the contract unit price per **hour**."

#### Payment will be made under

Change the Pay Item from "660.22" to "660.21" and change the Pay Unit from "Each" to "Hour".

## SECTION 674 PREFABRICATED CONCRETE MODULAR GRAVITY WALL

#### 674.02 Materials

Amend this section by adding the following after "Concrete Units:" and before the paragraph beginning with "Tolerances".

Concrete shall be Class P. The concrete shall contain a minimum of 5.5 gallons per cubic vard of calcium nitrite solution.

The minimum permeability of the concrete as indicated by Surface Resistivity shall be 17 KOhm-cm.

Defects Defects which may cause rejection of precast units include, but are not limited to, the following:

Any discontinuity (crack, rock pocket, etc.) of the concrete which could allow moisture to reach the reinforcing steel.

Rock pockets or honeycomb over 6 square inches in area or over 1 inch deep. Edge or corner breakage exceeding 12 inches in length or 1 inch in depth. Any other defect that clearly and substantially impacts the quality, durability, or maintainability of the structure, as determined by the Fabrication Engineer.

Repair honeycombing, ragged or irregular edges and other non-structural or cosmetic defects using a patching material from the MaineDOT Qualified Products List (QPL). The repair, including preparation of the repair area, mixing and application and curing of the patching material, shall be in accordance with the manufacturer's product data sheet. Corners that are not exposed in the final product may be ground smooth with no further repair necessary if the depth of the defect does not exceed 1/2 inch. Remove form ties and other hardware to a depth of not less than 1 inch from the face of the concrete and patch the holes using a patching material from the MaineDOT QPL.

Repair structural defects only with the approval of the Fabrication Engineer. Submit a nonconformance report (NCR) to the Fabrication Engineer with a proposed repair procedure. Do not perform structural repairs without an NCR that has been reviewed by the Fabrication Engineer. Structural defects include, but are not be limited to, exposed reinforcing steel or strand, cracks in bearing areas, through cracks and cracks 0.013 inch in width that extend more than 12 inches in length in any direction. Give the QAI adequate notice prior to beginning any structural repairs.

## SECTION 677 MECHANICALLY STABILIZED EARTH RETAINING WALL

On page 6 - 203 change "636.041" to "677.041"

Amend 677.042 <u>Precast Panel Tolerances and Surface Finish</u> by the addition of the following:

<u>Defects</u> Defects which may cause rejection of precast units include, but are not limited to, the following:

Any discontinuity (crack, rock pocket, etc.) of the concrete which could allow moisture to reach the reinforcing steel.

Rock pockets or honeycomb over 6 square inches in area or over 1 inch deep. Edge or corner breakage exceeding 12 inches in length or 1 inch in depth. Any other defect that clearly and substantially impacts the quality, durability, or maintainability of the structure, as determined by the Fabrication Engineer.

Repair honeycombing, ragged or irregular edges and other non-structural or cosmetic defects using a patching material from the MaineDOT Qualified Products List (QPL). The repair, including preparation of the repair area, mixing and application and curing of the patching material, shall be in accordance with the manufacturer's product data sheet. Corners that are not exposed in the final product may be ground smooth with no further repair necessary if the depth of the defect does not exceed 1/2 inch. Remove form ties and other hardware to a depth of not less than 1 inch from the face of the concrete and patch the holes using a patching material from the MaineDOT QPL.

Repair structural defects only with the approval of the Fabrication Engineer. Submit a nonconformance report (NCR) to the Fabrication Engineer with a proposed repair procedure. Do not perform structural repairs without an NCR that has been reviewed by the Fabrication Engineer. Structural defects include, but are not be limited to, exposed reinforcing steel or strand, cracks in bearing areas, through cracks and cracks 0.013 inch in width that extend more than 12 inches in length in any direction. Give the QAI adequate notice prior to beginning any structural repairs.

### SECTION 702 BITUMINOUS MATERIAL

#### 702.04 Emulsified Asphalt

Revise this Section by removing the first paragraph in its entirety and replace with the following:

Emulsified Asphalt shall conform to the requirements of AASHTO M 140. Cationic emulsified asphalt shall conform to the requirements of AASHTO M 208. Anionic emulsified asphalt Grade RS-1h shall conform to the requirements in the following table:

Type	Rapid-Setting	
Grade	RS-1h	
Tests on Emulsions	min	max
Viscosity, Saybolt Furol at 25°C SFS	20	100
Storage Stability test, 24-h, % <sup>A</sup>	-	1.0
Demulsibility, 35 ml, 0.02 N CaCl <sub>2</sub> , %	60	-
Sieve Test, % <sup>A</sup>	-	0.10
Residue by distillation, %	55	-
Tests on Residue from Distillation Test	min	max
Penetration, 25°C 100g, 5 s	40	90
Ductility, 25°C 5 cm/min, cm	40	-
Solubility in trichloroethylene or n-propyl bromide, %	97.5	-

A This requirement is waived if successful application of material has been achieved in the field.

## SECTION 703 AGGREGATES

#### 703,0201 Alkali Silica Reactive Aggregates

Remove this section in its entirety and replace with the following:

703.0201 Alkali Silica Reactive Aggregates. All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by an accredited independent lab submitted to the Department. Aggregate submittals will be required on a 5-year cycle, unless the source or character of the aggregate in question has changed within 5 years from the last test date.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting.

Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting as tested under ASTM C 1567.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include, but are not limited to the following:

Class F Coal Fly Ash meeting the requirements of AASHTO M 295. Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.

Densified Silica Fume meeting the requirements of AASHTO M 307. Lithium based admixtures Metakaolin

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

<u>703.06 Aggregate for Base and Subbase</u> - Remove the first two paragraphs in their entirety and replace with these:

"The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed, except that the test shall be performed on the portion of the sample that passes the ½ in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected.

The material used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. "

#### 703.19 Granular Borrow

Remove the gradation requirements table, and replace with the following:

	Percentage by Weight		
Sieve	Passing Square Mesh Sieves		
Designation	Material for Underwater	Material for Embankment	
	Backfill	Construction	
6 inch	100		
No. 40	0-70	0-70	
No. 200	0-7.0	0-20.0	

<u>703.33 Stone Ballast</u> - In the third paragraph, remove the words "less than" before 2.60 and add the words "**or greater**" after 2.60.

# SECTION 712 MISCELLANEOUS HIGHWAY MATERIAL

Section 712.061- Structural Precast Concrete Units

Under the heading, Quality Control and Quality Assurance, revise the fourth paragraph to read:

"Acceptance is the prerogative of the Department. The Department will conduct Quality Assurance (QA) in accordance with Standard Specification Subsection 106.5. Testing deemed necessary by the Department that is in addition to the minimum testing requirements will be scheduled to minimize interference with the production schedule. The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents."

Under the heading, <u>Concrete Testing</u>, revise the first paragraph to read as the following two paragraphs:

"Concrete Testing Acceptance of structural precast units, for each day's production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results. At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All testing equipment required by the QAI to perform this testing shall be in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made.

Quality Control test cylinders shall be made and tested in accordance with the following standards:

**AASHTO T 22 (ASTM C39) Test Method for Compressive Strength of Cylindrical Concrete Specimens** 

AASHTO T23 (ASTM C31) Practice for Making and Curing Concrete Test Specimens in Field

**AASHTO T141 (ASTM C172) Practice for Sampling Freshly Mixed Concrete** 

AASHTO T152 (ASTM C231) Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method

Concrete by the Pressure Method

AASHTO T196 (ASTM C173) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method

ASTM C1064 Test Method for Temperature of Freshly mixed Portland Cement Concrete

ASTM C1611 Standard Test Method for Slump Flow of Self-Consolidating Concrete"

Under the heading, <u>Concrete Testing</u>, **delete** the paragraph that begins: "At least once per week, the Contractor shall make 2 concrete cylinders.....for use by the Department....."

# SECTION 717 ROADSIDE IMPROVEMENT MATERIAL

### 717.02 Agricultural Ground Limestone

In the table after the third paragraph which starts with "Liquid lime..." change the Specification for Nitrogen (N) from "15.5 percent of which 1% is from ammoniac nitrogen and 14.5 /5 is from Nitrate Nitrogen" to read "15.5 % of which 1% is from Ammoniacal Nitrogen and 14.5 % is from Nitrate Nitrogen"



## **Environmental Summary Sheet**

WIN:	18670.00	<b>Date Submitted:</b>	6/10/16
Town:	Cumberland		
CPD T	Ceam Leader: Colin Greenan		
ENV I	Tield Contact: Deb Moore		
<b>NEPA</b>	Complete: 6/10/16 Programmatic Categorical Exclusion		
$\boxtimes$	Section 106		
	PA-F		
	Section 106 Resources: None		
$\boxtimes$	Section 4(f) and 6(f)		
	Section 4(f)		
	Review Complete - No Use		
	Section 6(f)		
	Not Applicable - No Takes		
$\boxtimes$	Maine Department of Inland Fisheries and Wildlife Essential Habitat		
	Not Applicable Timing Window: Not Applicable		
	~		
$\boxtimes$	Section 7		
	No Effect		
	Species of Concern: Northern long-eared bat		
	Comments/References: No tree clearing proposed		
$\boxtimes$	Essential Fish Habitat		
	Not applicable (no in-water work proposed)		
$\boxtimes$	Maine Department of Conservation/Public Lands, Submerged Land Lease		
_	Not Applicable		
$\boxtimes$	Maine Land Use Regulation Commission		
±4 7•			
*Арри	cable Standards and Permits are included with the contract		
$\boxtimes$	Maine Department of Environmental Protection		
	Not Applicable-No in-water work		
*Appli	cable Standards and Permits are included with the contract		
$\boxtimes$	Army Corps of Engineers, Section 10 of the Rivers and Harbors Act and Sec	ction 404 of the C	lean Water Act.
	Not Applicable-No in-water work		
	cable Standards and Permits are included with the contract		
$\boxtimes$	Stormwater Review		
	N/A		
$\boxtimes$	Special Provisions Required	>T/4 \\\	
	•		Applicable
	Special Provision 656-Minor Soil Disturbance		Applicable
	Standard Specification 656-Erosion Control Plan		Applicable
	<u>.</u>		Applicable
			Applicable
	<u>-</u>		Applicable
	Special Provision 105.9	N/A	Applicable

\*All permits and approvals based on plans/scope as of: 6/9/16

<sup>89</sup>